

CURIOSITIES
OF
NATURAL HISTORY.

Third Series.

BY

FRANCIS T. BUCKLAND, M.A.

LATE STUDENT OF CHRIST CHURCH, OXFORD :

HER MAJESTY'S INSPECTOR OF SALMON FISHERIES, ETC.



LONDON:
RICHARD BENTLEY AND SON,
NEW BURLINGTON STREET,
Publishers in Ordinary to Her Majesty.
1875.

LONDON: PRINTED BY
SPOTTISWOODE AND CO., NEW-STREET SQUARE
AND PARLIAMENT STREET

PREFACE.

IN THE FOLLOWING PAGES will be found some of my experiences and observations during the last few years.

The subjects treated are certainly various, but I have always made it a rule to observe and learn wherever I go.

For more than seven years I gave to "The Field" newspaper my best labours, by contributing weekly articles to its columns. Of these contributions, by legal agreement, I retain the copyright, and therefore reproduce from that journal selections from my writings.

Owing to the treatment I received, my connection with "The Field" has now entirely ceased.

I beg to offer my thanks to the proprietors of the "Leisure Hour," "Household Words," and "Chambers' Journal" for their kindness in allowing me to reproduce some of my articles which originally appeared in their columns.

I have endeavoured to give credit to all who have afforded me any information or have shown me any acts of kindness.

This Second Edition varies somewhat from the first. I have re-written and otherwise amended many of the articles, and have added much new matter. It will be observed that quotations are frequently made from "Land and Water." This is a weekly journal which the late lamented Mr. Ffennell and I myself, together with a certain number of friends, set on foot. Our object was to promulgate sound views upon the important subjects of "The Fisheries" and "Natural History as applied to practice," and I shall always be glad to receive communications on these topics for its columns. The importance of the British Fisheries, whether cod, — herring, — mackerel, — deep sea trawling, or oysters, cannot be overrated. In reality, we know little or nothing about the habits of sea-fish—whence they come, where they go, where and how they deposit their eggs, and upon what they feed. I trust the time is not far distant when the Government will appoint some competent practical naturalist to investigate these matters, for without knowledge of the habits of fish it is impossible to legislate for their protection. For many years I have deeply studied the oyster

question, and through the means of an experimental fishery belonging to myself and three private friends, at Reculvers, near Margate, I am gradually finding out the history of this most uncommunicative but yet most valuable mollusc.

The Salmon Fishery question, I am glad to say, has now got a strong hold of the public mind ; and the Boards of Conservators of the various salmon rivers in England and Wales are doing their best to assist that much-persecuted fish the salmon against the various physical and legal difficulties which are opposed to its interest.

Her Majesty's Government have been pleased, since the First Edition of this book was published, to give me the high and responsible office of one of the Inspectors of Salmon Fisheries for England and Wales. The public may rest assured that I will do my very best to fulfil the duties of my office both in and out of doors. I have also had the gratification of receiving within the last year three medals for Fish Culture from France—one from the Exhibition at Arcachon and two from Boulogne ; and have been elected Hon. Member of the Acclimatisation Society at Melbourne for sending the ova of the English non-migratory trout to Australia, at the request of my friend

J. Youl, Esq., to whom the honour of introducing salmon to Australia is due.

It will be observed that I make reference to "The Museum of Economic Fish Culture" at the Royal Horticultural Gardens, South Kensington. I have set up every preparation in this Museum with my own hands, for I feel convinced that the public will obtain a better idea of Fish and Fisheries by having specimens before their eyes than by reading about them in books. After examining the magnificent collection of casts of fish in the Museum of the Royal Society of Dublin, I was determined to have one of my own. I therefore taught myself to model in plaster of Paris, and have now a very large series of these casts. Some of them have been coloured by Mr. Briscoe, the artist, but the process is expensive. In the Museum can be seen casts of a "Ca'ing" whale,—a large thresher shark,—a sword-fish,—a sturgeon,—many large salmon,—and other fish of economic value. I cast most of these fish at home, at night, after the day's work is over, and the entire expense of this labour, as well as of the preparations in the Museum, comes out of my private income.

The process of hatching salmon and trout, (which in my absence will be explained by the attendant, Neville), I carry on on behalf of the Science and Art Department of the South Ken-

sington Museum, under whose patronage my collection is exhibited to the public at the Horticultural Gardens.

The sheets of this Second Edition were mostly printed during the time that I was absent from home on official inspections of salmon rivers. My friend Henry Lee, Esq., F.L.S., has most kindly taken much trouble in their correction and revisal, and I gladly take this opportunity of thanking him heartily for his kindness.

I hope, should health and strength be spared, to continue my exertions in the investigation of the wonderful works of creation and my endeavours to reduce these investigations to practice for the good of my fellow-men.

To my excellent Father and Mother I owe a good education, the most valuable legacy a son can inherit. I trust ever to do honour to their name as a slight recompense for all that I owe to them.

Finally, reader, forgive all shortcomings and imperfections, and rest assured that if I can ever be of service to you in the good cause of "The Fisheries" and "Natural History," you may command me.

FRANK BUCKLAND.

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ROBINSON CRUSOE AT PORTSMOUTH.

ONE fine warm day in the summer of 1863, being tired out with the heat of London and incessant work, I stretched myself out upon the shingle near Southsea Castle, and was soon dozing in the sun. I was ere long awoke by hearing the splash of an oar, and jumping up hastily, saw, good reader, the scene which, by the aid of the pencil of Mr. Hyde Briscoe, the artist, I am now enabled to reproduce.

I observed a little way from the shore a queer-looking old man sitting in the smallest boat that could contain a human frame, and gazing fixedly at me. This old man's face was browned by long exposure to the sea-breeze; his grizzled hair, like bunches of seaweed, hung loosely about from under his cap; his dress consisted principally of rags of old blue sailor's cloth, and he had but one hand, with which he sculled his boat, which contained his rude tackle and himself.

Notwithstanding his dress and turn-out, the old man's

countenance was beaming with intelligence, and from under his well-formed forehead brightly gleamed two telescopic-looking eyes, indicating an observant and reflecting mind, showing that (as I afterwards found out) he was no ordinary person.

"By Jove!" said I, "well, I am lucky; here's Neptune himself! I never thought I should have had this chance. Good morning, my friend."

"Morning, sir," said he with a touch of his old sea cap.

"What have you been after, if I may ask?"

"Pout* fishing, sir, all night, and terrible bad luck of it I've had, the tide was so cruel strong and the water was so slobby, that I only ketched a few pouts. But I lost such a lobster! I hauled him up alongside, and I got hold of his claw; but it was so big I could not grasp master Lobster with my one hand; and he was well hooked too, but he give a jerk and a kick and dragged the hook straight, and he went down starn foremost thinking he had been plenty high enough up. Ah! he *was* a fine lobster, he was all twelve pounds, and worth four shillings to anybody."

"But what have you done with your other hand?" said I.

"Oh I lost him too," answered my friend.

* Whiting-pout.

"Did you lose him just now?"

"No, sir. I lost him thirty years ago, when I was in His Majesty's service as captain of the foretop on board the 'Hind' frigate, off Cape Horn, on the coast of Peru. I got him jammed between two water casks, and the doctor took the slack of him off."

"What's your name?"

"Well, my right name is George Butler, but they call me 'Robinson Crusoe' about these parts."

I bought his pouts, and proceeded to examine his boat, which he paddled ashore. Robinson Crusoe told me he had given a sovereign for her seven years ago. Such a boat it was!—more like in size and shape the half of a house water-butt than a boat: so rotten too, that a good kick would have sent it into a thousand pieces. The planks were started in many places, and there were great holes in the sides, mended with bits of old canvas, leather, and tin nailed over them. The bottom was covered with sea grass and shells; yet in this boat old Robinson Crusoe faces weather in which no ordinary boat would live; he has no fear of the waves.

"I thinks the waves knows me, sir," said he; "they never hurts me and my boat. We swims over their tops like an egg-shell, and I am out a-fishing all weathers, particular when a storm bates a bit, because then the water thickens, and the fish bites. My boat never ships a drop of water, not so much as there is rum in this 'ere

rum bottle." The old man winked as he said this. "If I was a rich man, and got a thousand a year, I would still go out a-fishing, for I likes the sport; and I'd go to Greenwich Hospital, but then I'd lose my fishing. I am a very poor man, but I *must* have my fishing. I generállly goes out of a night and fishes all night; but its terrible cold at times at night, and then I rigs up my hurricane house. I gets under my old tarpaulin and lies as snug as may be. And the ships sees me better because I looks like a buoy, and keeps clear of me.

I never mind rough weather; but it's the fog as is so deceiving. One morning I was off the Spit, when I thought I saw a man in a boat coming; I paddled up to it and found it was only a bottle cork as was floating with the tide, and at that time a wine bottle floating in the fog looked like a seventy-four. I saved the Irish steamer coming from London the other day when the fog was terrible thick. She was coming into Portsmouth, and I was fishing at the mouth of Langston harbour when I hears her paddle-wheels a-coming. I halloes to her as how she was going stem on to the Lumps Rocks, and so she would have, if it had not been for me; but they never gave me nothing at all for saving of them. It's much more lonely at night now than when I had my Puddles along with me."

"Puddles! what's that?"

"It's my cat, sir, and that's why they call me 'Robinson Crusoe,' 'cause of my boat and my cat. He was the wonderfulllest water cat as ever come out of Portsmouth harbour was Puddles, and he used to go out a-fishing with me every night. On cold nights he would sit in my lap, while I was a-fishing, and poke his head out every now and then, or else I would wrap him up in a sail, and make him lay quiet. He'd lay down on me when I was asleep, and if anybody come he'd swear a good one, and have the face off on 'em if they went to touch me; and he'd never touch a fish, not even a little teeny pout, if you did not give it him. I was obligated to take him out a-fishing, for else he would stand and yowl and marr till I went back and catched him by the poll and shied him into the boat, and then he was quite happy. When it was fine he used to stick up at the bows of the boat and sit a watching the dogs (*i.e.* dog-fish). The dogs used to come alongside by thousands at a time, and when they was thick all about he would dive in and fetch them out jammed in his mouth as fast as may be, just as if they was a parcel of rats, and he did not tremble with the cold half as much as a Newfoundland dog: he was used to it. He looked terrible wild about the head when he come up out of the water with the dog-fish. I larnt him the water myself. One day when he was a kitten I took him down to the sea

to wash and brush the fleas out of him, and in a week he would swim after a feather or a cork.*

"He was a black cat natural, and I think the sea water made him blacker; his coat was as clean as a smelt, and had a noble gloss on it. I would not grudge a five-pound note, poor man as I am, to have my cat back. Oh dear, my poor cat! My Puddles was as good a cat for a rat as he was for a fish. I cleared out my cellar once, and I found twenty rats' skins as Puddles had killed, all scooped out as clean as your 'bacca-pouch, but the tails was not touched. He was a plaguey cat, though, for he would go out into the harbour to catch rats, and come in all covered with mud and lay on my bed. I used to give *him* the cat. I says, 'So you've been up on my bed before you was dry, have you? Now take your punishment like a man.' So I takes a nettle, and stands him on his front paws on the bottom step of the stairs, and I gives him his dozen. He stood quiet enough while I gave him a dozen; but if I gave him thirteen, 'marr' he'd go, and away he'd fly as savage as could be. It was a bad day when I lost my Puddles; he was the most superbest cat as was ever afloat. I

* While this story of how Robinson Crusoe trained his cat to the water was fresh in my mind, I saw some poor little children taken down to the bathing-machine and treated in a very different way to that in which George treated his Puddles. I would beg to refer the reader to the Appendix.

thinks he was taken aboard a ship as went to the West Indies ("sailors is terrible fond of cats,* leastways them as has only got one tail), or else he was killed for his fine skin. There was a terrible cry for cats' skins in Gosport at one time, and if I could only catch the beef-headed fellow as killed him, I'd up with my stump and hammer him like a stock fish. Them as is cruel to dumb animals is always cowards; and if I was a judge I'd soon clap the irons on their legs. I am going to bring up another cat to the water. I got a kitten at home now, but he won't act at all. I must get one before he can see, and in with him into the water, and then he will take to it. Cats is terrible hard things to drown. There was a man the other day as wanted to drown a cat, so he tied a five-pound brick round his neck, and hove that ere cat with the brick on him in the water. But when he got home the cat was there fust; so he ties a stone on to the

* "*Cats at sea.*—Our readers must have often wondered why seafaring men are so fond of taking cats with them on a voyage. This is explained by two circumstances. Marine insurance does not cover damage done to cargo by the depredations of rats; but if the owner of the damaged goods can prove that the ship was sent to sea unfurnished with a cat, he can recover damages from the shipmaster. Again, a ship found at sea with no living creature on board is considered a derelict, and is forfeited to the Admiralty, the finders, or the queen. It has often happened that after a ship has been abandoned some domestic animal, a dog or canary bird, or most frequently a cat, has saved the vessel from being condemned as a derelict."—*Once a Week*.

cat, but even *then* he got sheer of the rope, for he gnawed it off with his grinders, and it was three times before he drowned that ere cat."

"I suppose you know the water here pretty well, Robinson Crusoe?"

"Know the water, sir! I knows it well from Bembridge Ledge to the Needle Rocks, for I have fished a'most every foot of it; but it's the wracks* as harbours the fish most. The 'Royal George' used to be a capital wrack. A regular lubberly job that was. She went down 'holus bolus,' she did; but they come and blowed her timbers all to pieces; and there arn't not a bit of timber nor yet a fish on that wrack now. The other wracks is only barges, and brigs, and such like. If I was a gentleman, I would just buy a lighter, and sink her, and in about two years she would be a splendid wrack. There arn't one out of a dozen harbour men as knows the marks of the best wracks, as they don't take notice sufficient; and if you're a foot outside of the mark, you may as well be at home and a-bed. I'll tell you the mark of the wrack where I just catched the lobster, as you seems a kind sort of a gentleman. You must open the white chimney on the edge of the mud battery, and them three little trees on the windmill, and that will bring you right on top of the wrack. It's

* Wrecks.

the pouts as likes the wracks; they eats the little teeny long-pinchered crabs, no bigger than my thumb-nail, and the sea woodlice, and such like; but a pout arn't particular like a conger or a whiting; and them heavy whiting do bite 'logie' dull like, and it's a curious thing as any fish will eat boiled cabbage or boiled onions, and they comes about the ships at Spithead for it. I knows of seven or eight wracks hereabouts where I fishes. The 'Boyne' is about as good as any of them. She was a fine ship was the 'Boyne.' She caught fire at Spithead (I think it was in 1798), and all her guns was shotted; they went off one after the other right in among the fleet. Her magazine was full of powder, so they set her adrift, and she took the ground just at the edge of the Horse bank, and there she fired away her big guns anyhow till she blowed herself up, and she is now the wonderfulest wrack about here. There's a wonderful sight of timber, and a wonderful sight of fish about her, and they always runs good. I fishes at her all the year round, and yet there's always fish, though sometimes you can't get a smell out of them, much less a bite. I once caught a hundred dozen of pouts in three bits of tide, and some of them was very fine pouts. The young flood is the time to catch 'em; then they stops nearly an hour, when the whole body of the tide comes in they begins again. There ain't half so many pouts about as there

used to be; it's the town gas as kills the fish. If a porpoise was to swallow one bladder of gas, as big as a halfpenny. as it comes out of Portsmouth harbour, he'd turn turtle in a minute; it's real poison is gas, to any fish that swims—I don't care whether it is fresh or salt water."

"But how do you manage with one arm?"

"Why, sir, my stump is very useful, and though I have lost my right hand I still feels my fingers on, particular at the change of the weather. I holds my hooks down with the stump—and it's only made with an old bit of leather and a boy's spin top at the end—and I puts on the worms with my left hand. I can feel a bite, and haul up fish with my stump; but I often fishes with my mouth when my other hand is so cold that I cannot use him.

"There's some fine fish out away by the Warner Light. I once caught three cod there, and fine fellows they were too. They come off the Horse Sands, where the floating light is; but there arn't many fish about the Spit Buoy.* But we don't call it the Spit now; we

* A few days afterwards we saw a curious-looking object coming along the shore. We ran up the bank, and, behold, it was our much-respected friend the *Spit* himself. Poor old fellow! all the long winter had he been out at sea, buffeted about by every storm and every wave, and tolling his bell all the time. Alas! he was worn out and wanted repairs. A boat-load of dockyard sailors were pulling him ashore, having

calls it the Crinoline Buoy. There's a bell hung up in her, as tolls with the waves, and there's seats all round enough to hold a dozen men, with chains for them to catch hold of, and save the lives of the poor fellows as is wracked; and I see the gentleman a papering the Crinoline Buoy as well as he is Robinson Crusoe." (See engraving.)—"Thank-ye, sir. Now I shall go and get a 'monkey full of one-water grog,' and shall feel quite comfortable after my night's work. Glad to see you out fishing along with me, sir, if you don't mind a poor man's plain talk; and I'll show you all the best wracks, for I knows where the fish lies at these tides as well as any man as comes off the harbour; and you seems fond of curioes, sir, and I catches some curioes sometimes. Will take you out fishing to-morrow if you like, sir, and show you some of the wracks."

The next morning, however, we were doomed to disappointment, for the great waves came thundering in

fixed his "double" on his place at the edge of the *Spit* to take his turn at work during the summer. The white paint was nearly all washed off his rusty iron face, on which he wore a long beard of sea-weed; his belt was green as grass; he reeled about even in still water, as though he knew not for a moment what it was to be still. The letter T was washed out of the label—"Spit," and he looked like an old bull-dog with one eye. Never mind, old fellow, you've done your duty well; I only hope they won't knock you to bits and sell your ribs for old metal to the Jews. These buoys would be fine places for trying experiments with various substances to prevent the fouling of ships' bottoms with weeds, barnacles, &c.

rattling the shingle backwards and forwards, and dashing their white foam against Southsea Castle, and as the old barnacle-backed sailor said of the weather in the Bay of Biscay, "After that it left off blowing, and went on anyhow.'

At last the weather became favourable. We therefore at once determined to go fishing, and see whether, after their long holiday from hook and line, the fish would not be in a biting humour.

"How long shall we be out?" said the friend who went with me.

"As long as the fish bite," said I; "therefore we had better take some food with us, for there are no bakers' shops at the Spit Buoy, and they don't sell cheese at the 'Boyne.'"

"Morning, sir," said Barney, the civil and obliging provider of boats on the beach, and whose name was once Barnabas, but who never will be called anything but Barney again. "Better have the 'Laughing Jackass,' sir; she's all ready."

I have an unfortunate habit of looking after little matters, and knowing that there is a hole, which *ought* to be stopped up by a cork in the bottom of every boat, I examined to see if the cork was in its place; of course it was *not*. We soon got a cork and fastened it in tight, one of our party telling us that he once knew a young man who went out a little way to sea, and who, finding

that there was a little water in the bottom of the boat, actually took the cork out of the hole to *let the water out* quite forgetting that the water would rush *in*; it did rush in to his great surprise, and the boat was pretty nearly full before he could get ashore again.

We were soon out on to the marks Robinson Crusoe had indicated, and were wondering whether the old man would keep his appointment. At last we were delighted to see him paddling away out of the harbour. He was soon alongside, his brave old face radiant with smiles, for he had taken a great fancy to me, though he does not to everybody.

"Are we on the marks, George?"

"Not by a long ways, sir."

"Then just put us right like a good fellow, will you? Better come into our boat; we will tow your old tub astern."

"Don't you go to insult my old boat, sir, or I won't show you the wrack."

"Never mind, George, it's only a joke."

"Let go the anchor, boy," said George.

The boy picked it up and spat on it.

"What's that for?" said I.

"That's for luck," said George, "and to make the fish bite; but it don't always, for a chap the other day spit on his anchor (and it was a bran new one, too); he heaved it overboard; but there was no cable bent on it

so he lost it right off, and was obliged to go home to fetch another. So he lost his anchor and his tide of fish too.

“The pouts are terrible thick about here. They lays all round the wrack, and you must just lay over 'em and get the anchor fixed right, or else you yaws out of 'em; but if you manages proper, you will yaw right in again, all amongst 'em. If you ain't exact on the mark, you might just as well put your line overboard on Southsea Common. Pouts is very nice in their feeding. The soldiers* is best bait for 'em in clear water, the lug worm when the water is thick; but I holds with lug for all that. When you ain't got no soldiers, nor yet you ain't got no lug, a bream cut up is as good a bait as anything; a nice fresh bream cut is as good as a pint of lugs any day. Soldiers is terrible scarce about here, leastways them as wears shells and not red jackets, and soldiers in the sea shifts like soldiers on the land, you never find them long in the same place. The pouts generally runs pretty 'rubbly,' all of a size like, and they have got teeth in their mouths just like a Christian. I thinks they preys on one another. They're like the New Zealanders; they are rum chaps, them fellows, for I have heard that when they have done with their wives they eats 'em. I've caught

* Soldier crabs.

thousands and thousands of dozens of pouts, and I once caught a hundred dozens in three tides, and then I dropped it. That was the time that they was working in the wrack a-getting up the timbers, and the diver seen the pouts all round the bait. He said there was millions of 'em, but they would not swim away from his line. When he was down there among the wrack, he seed a great lobster, and he ups and knocks him down with the crowbar. The pouts won't bite when the east wind is coming; the cattle knows it and so does the pouts. I can tell by the biting of 'em as there is an east wind coming, and they knows it is a-coming the day before it comes. This is a lucky wrack where we are on now, sir; and I catched some 'curioes' on it once. I was out one day, and the pouts would not bite. I could not even get a smoll out of 'em; so I thought I would have a creep round with my anchor, just to pass the time, and the first haul I catched an oyster drudge (dredge), the second I got a boat's anchor, and the third a bit of a boat's copper-fastened bottom, and the fourth a great rope of the Ryde horse tow-boat, and the fifth I catched nothing at all. Altogether what I did creapt up fetched me four shillings."

"Tell me when pouts spawn, George."

"Well, sir, that palls my capstan altogether. I have catched millions of dozen in my time and never seed one in spawn yet; and another curious thing is,

the male fish is more scarce than the females ; perhaps it is that the gentlemen is more cleverer than the ladies, and that ain't like our own species, is it, sir ?”

“ Do they ever catch anything beside pouts about here, George ?”

“ Yes, sir, sometimes they catches convicts a-floating about the harbour. A waterman was rowing along quiet enough one day when he seed a bushel basket floating along with the tide. He went up to it, and lifted it up to put it into his boat ; he was terrible surprised to find a living man's head underneath ! A convict had escaped the guard, and had somehow managed to get into the water, concealing himself under the basket. He was floating away unnoticed and unobserved out of the harbour, when the waterman, unfortunately for the poor chap, took a fancy to the basket and discovered him.”

“ Did they let him go, Robinson Crusoe ?” said I.

“ Why, sir,” was the answer, “ the waterman had a good heart to let him go, but he was a Government pensioner, and was obligated to give him up, besides which they gives a sovereign for catching a convict, though it ain't often one finds them floating about the harbour under baskets. There ain't no chance for the poor fellows with the basket plan again, as everybody as sees a basket in the harbour goes out to see if there ain't a convict under it. I've turned ever so many

baskets 'over myself, but I ain't found no convict as yet; I ain't had the luck."

"And how's your stump to-day, George?"

"Oh! he's pretty nigh worn out, sir. The Government would give me a new one if I axed 'em for it, but they ain't got many wooden *arms* in store, though they've got plenty of wooden legs. I ain't going to trouble 'em at my time of life; this old one will serve my time, and I can always get a new peg-top to put in the leather part."

"Did the operation give you much pain; did you take chloroform!"

"No, sir, I never had no chloroform when I had my arm off; all I had was a chaw of 'bacca in my mouth; but I still feels my thumb, as was taken off with my hand, and the wart on him is still one of the best theometers* as I knows of. The doctor give me one of my fingers, and I brought him home and put him in a bottle of rum."

"I suppose you have been out in bad weather, in your old boat, sometimes?"

"Yes, sir. I waits till the wind 'bates a bit, and then out I goes, wet or dry. I never shipped a sea in her but once, and that was three buckets of water. That was an awful night, sir, that was enough to blow a Quaker's hat off. I was going away for Langston

* Thermometer.

Harbour to get a tide of fish, and it came on to blow when I was just outside the harbour. The waves was frightful to look at, just like hills rolling along. I see three great seas a coming one after the other frowning at me (and these big rolling seas always goes by threes all the world over), but these fellows was frightful. So I says to myself, I must put my wits to work and double you, my gentlemen, or else it's all up with me; so I lowers my sail and looks out. The first sea broke just short of me, the second passed right under me before he broke, and before the third came I was in shoal water inside the harbour—and thank God for it! It was a lucky night for me, for as soon as ever the tide slackened I caughted a terrible sight of fish—ten pounds of the beautifullest dabs as ever you see, and seventeen cod. I caughted 'em fine, for they *did* bite that night. That's just the place where I once seed the biggest cod I ever did cast eyes on. I observed a spangle on the bottom, and then up he comes out of the grass. I puts my line overboard directly with a fine lug on the hook, and drops it right over his nose; so he swims up, opens his mouth, and sucks the lug into it, and there I watched him just a tasting 'em like with his tongue. When I thought it was time, I jerks on my line, and the hook comes out of his great gape as easy as a straw out of a glass; so I tries him again. He takes it into his mouth again, cants up and spits it right out in my face, and I never caughted him

after all. That's the way *that* gentleman served me; he knowed better than to get hooked."

"When do you go out fishing most, George?"

"I don't fish much of a day, sir; I fishes most of a night, and a'most every night, too, when it's anyways like weather. I got no clock, nor yet watch; but I've got the stars, as will let me know the time to a quarter of an hour. There ~~is~~^{is} one star in particular as serves me, and in a month's time I noticed there was never a quarter of an hour's difference in her time."

"Do you ever go to sleep, George!"

"No, sir, I don't go to sleep; but I tell you what, sir, I thinks the *fish sleep* of nights—that's my experience of 'em. I've been out thousands of nights, and I've always observed as one particular hour is different from any other hour of a night, and that's *between twelve and one*. The fish never bites at that time, and after that hour is over they begins again, and keeps on till daylight; but *before* that hour they always fishes slack, and I can sleep between twelve and one if I likes, for it's no use heaving the line overboard; but after the clock strikes one the fish won't let me go to sleep, and I've always found it so. That's what makes me think the fish sleep; if they don't sleep they rises to the top of the water. When the water is thick, and it's a moonlight night, that's the time to catch 'em; if the water is thick, and it's dark too, the fish can't see

the bait. They are on the bite, too, of frosty nights. I puts my sail over my head, and it gets as white as a sheet. I often prays for it *not* to come daylight, for I never feels cold as long as the fish bites.*

“The night is the best time to catch the congers, sir. The congers is as taffety fish as is; there’s not a delicater fish as swims, and they are very nice in their feeding. If a whelk was to get on the bait, the conger would never touch it,—not if you was to bide all night; they are regular bait-robbers them whelks. But when the congers gets on to the hook they lets you know it, and when you pulls ’em up, they curls their tails and holds a wonderful sight of water; its ten to one if you don’t lose ’em if you have not got strong gear. But you must have nice fresh bait. If there’s a bone in the bait they wont touch it; Master Conger will have the first grab, or none at all. I’ve cut up a dozen pouts, and seen the conger smack at them all, and then he never takes them if they don’t quite suit his taste. The biggest conger as ever I caughted was in ‘the grass’—(i.e. *Zostera*)—at the back of the Gosport Hospital. Just as the sun goes down I hooks my gentleman, and says I to the man who was fishing near me, ‘Joe, I’ve got him this time and no mistake, and a beautiful fish he is.’ He towed me and my

* This paragraph started a long discussion in “The Field” relative to the sleep of fishes. I would refer to the Appendix for many curious facts and observations on this point.

little boat round my anchor six times, and I got a good strong Dutch line—so strong that three men could not break it, for we tried it afterwards. Master Conger had got hooked outside of his teeth, still the hook had got a good strong holt, but yet it gave him the chance of chawing the line; and he kept on chawing it a good one, so I played him till at last I got him alongside, and tried to gaff him, and then he flew right at me out of the water. It was a terrible dark night, and I could hardly see, but I hit him a rap over the head with my stump, and then I was obliged to let him run again, or he would have slewed my arm right off, and pulled me out of the boat as well, for I could not slip my cable. At last I got terribly tired, and so did Master Conger, for he let me haul him up alongside; Joe then came up with his boat, and we both whipped our gaffs into him amidships, and jerked him into the boat. When he got aboard I thought he would have knocked my old *bōm āi* to pieces, for he was fore and aft in a minute, and sent everything flying. I was only afraid he would get his tail on the gunwale (for congers is terribly strong in the tail) and then he would have hauled himself overboard; so I watched my chance, and hit him a crack just where his life lays, and then he was quiet at last. He was all six foot long and sixteen inches round the thickest part. His great head was like a sheep's, and his jaws was awful.

I sold over four shillingworth of him, besides what I ate myself; and all along his backbone was fat, as fine and white as suet. He *was* a fish, he was !”

“ Can you swim, George ? ”

“ Swim, sir ! I can swim like a fish, but I can’t swim as well as a chap as I heard one night in ’Meriker offer to lay a thousand dollars as he would swim a voyage as far as a ship, if he only had a bag of peas for provisions, and an anchor and chain to bring him up at night.”

We were having our lunch, and the line was “ fishing by itself,” when all of a sudden the top began to “ bob, bob.” The gyrations and play of the fish, four fathoms deep in the water, were so extraordinary that we could not make out the nature of the prisoner. Robinson Crusoe, however, at once pronounced that it was a lobster, “ I knows by the bite of him.” At last, up came the lobster to the surface, flapping his tail furiously and pulling backwards like a dog at a bit of carrion ; but we played him judiciously, tired him out, and at last we got him close to the boat. “ Don’t go to gaff him, Mr. Buckland ; his shell is like glass, and you will lose him : I’ll have him,” said Robinson Crusoe. So, watching his opportunity, he caught the lobster by the tail and whipped it into the boat in an instant. “ That’s a beautiful fish, sir, and it’s a ‘berried hen ;’ look at the spawn under her tail, sir. Mind your toes, boy, or she’ll

have one on 'em off in a nip. She is as spiteful as a mad dog now she's got catched, and if you torment her she is sure to shoot her claws, and that will spile her for boiling. Look how she's turning her great long horns fore and aft; and look here, sir, she's nipped this pout right in two with her pincers. 'Tis not often you catches a berried hen like this, and she's worth all two shillings. Look out, sir—sit fast, gentlemen: here comes the swell from that great lump of a packet as she is rounding the Spit buoy; that's the boat I saved when I was a-fishing off Lumps Bay, and now she wants to capsize us. She's bound to London now from the westward."

"Are there many lobsters about here, Robinson Crusoe?" said I.

"Why, no, sir, there ain't; but there would be plenty of 'em if it was not for the congers; they eats 'em when they slips their shell and they are quite soft. When it's loose they goes stern foremost agin the rock, and beats it off their backs; but a crab he'll crawl out of his shell, *he* will. A soft lobster is as good again as a hard one for eating, but the gentlefolks don't like 'em; they will only buy 'em when their shells is hard. When you puts lobsters in hot water they cries like a child. I once catched a terrible big lobster, he was 12 lb. full; I felt him crawling away with the hook, so I jerks it, and I pulled him right up to the surface of the water,

and when he seed me he begun a fluttering, and give a jerk and pulled the hook quite straight, and sunk like a stone to the bottom."

" Did the hook kill him, George ?"

" He die ! Lor bless you, sir, he never died ! He hurt *me* a precious sight more than I hurt *him*, for I was terrible put out at losing him ; he'd have fetched me four shilling if I had catched him. Another time my pout-hook got foul of something, so I hauls it up, and what should it be but a boatswain's bucket, and sitting in 'it was Master Lobster, about 6lb. weight. He could not open hisself a bit, because he was jammed into the bucket, and did not know the way to get out.

" Lobsters ain't dangerous things like crabs. There was a man killed by a crab some years ago at the back of the Isle of Wight. He was down among the rocks at low tide, and he seed what they calls ' a pound crab ' goin' into a hole in a rock. He had not got a gaff, or a crooked nail on a stick, with him, to fetch him out, so, foolish-like, he puts his hand in to him, and the crab felt his hand, and ' scrumpled ' up all his legs together, and jammed the man's hand into the hole in the rock. The poor fellow halloaed and halloaed, but there was nobody nigh to help him. He could not break the crab's shell with his fingers, and the crab kept his legs scrumpled up at the hole ; so the tide come up, and the poor man was drowned. When the tide went down

they found him quite dead, with his hand still in the hole along with the crab."

"I suppose you have seen some fun when you were on foreign service, George. Now, come, spin us a yarn, for the pouts do not bite very freely."

"Well, sir, if you and the gentleman alongside of you wants a yarn, here goes.

"I recollects one night when we was off——, in the Mediterranean, we was going on to the ship with a officer, and we seed a young chap under a winder, and he was making the awfulest noises and faces as ever you heard or see, for all the world like a great jackass a braying; and then he stopped his noises, and puts his arm out like a windmill, and goes round like a weather-cock. 'Well,' says I to myself, 'if that's quality courting, it's a rum game.' So by-and-by a young lady comes to the winder, so he catches holt of this ere young lady, collars, and runs off with her; so when we see this we run after him and the lady as he had got in his arms; and when we catched him, the officer gives him the pint of his cutlash, and says, 'You'd better drop her, young chap, or I heave you over the cliff! so he drops her, there and then, and the officer says, 'Now you'd better cut and run, my dear; 'there ain't British officers always about under your windows when these ere foreign varmint is up to their larks.' But I thinks the Officer went up to see the lady next day, for all that, to ax her

if she caught cold. It is these erè foreign ladies as spiles themselves with paint, putty, and glue; a good slouch with a bucket of nice fresh water would bring it all off; the best paint as a lady can buy spiles her directly she puts it on. I likes to see the ladies come down to the shore in summer with their hair down: they ain't like the nuns in foreign parts; *they* gets cropped, and that spoils 'em just as much as paint."

"But who is coming now George? Some poor old man in a boat, all by himself: why he can hardly get along at all. Who is he?"

"Why, sir, he is old George Brewer, but we calls him 'Uncle.' I knowed the old man as long as I knowed myself; he's no fisherman, because he won't be told; he thinks he knows, but he don't know; he thinks he knows where the wrack lies, but he generally pulls up sixty yards one side or other of it; he is the oldest pensioner about here; he has received government money these sixty years, that's all. How are you, Uncle? the gentleman wants to speak to you."

"Why you are getting on in years, Uncle," said I; "how old are you?"

"I'm eighty-six come next Michaelmas. I was born in 1777."

"I suppose you can recollect a thing or two we know nothing about, Uncle."

" Why yes, sir : one of the first things as I recollect was my mother holding me up to see the masts and bowsprit of the ' Royal George ' just after she went down, and I was in the glorious 1st of June along with Lord Howe, in the year 1794. There was thirty-five sail of the line ; so after we had had our breakfastes, we hoists the bloody flag and goes down right among 'em, and we took a three-decker, ' La Montagne,' they called her. We killed a terrible sight of men that day, and all next day we was a heaving of 'em overboard. At last we come to one man who had got no legs, and he begged and prayed not to be heaved overboard, cause why, he warn't dead. So the officer come's along, and we axed him what was to be done with this ere Frenchman who said he warn't dead. So he said, ' Oh, yes, he ain't no good, he's sure to die sooner or later, heave him overboard ;' so we heaved him overboard, and we never seed *him* again."

" But did you never get wounded yourself, Uncle ? you have lost an eye, have you not ?"

" Lord, no, sir," said the old man ; " I got two as good eyes as any man in the harbour"—and the old man lifted up his great shaggy eyebrows and showed us a couple of piercers—" but I did get a wound once, and that was in the year 1798."

" Where were you wounded, Uncle ?"

" Oh ! I was wounded on this ere leg, as I'm carrying

about along with me now. I'm tarnation sorry as how I did not have him slewed off at once and a done with him, as George there had done with his arm. This leg of mine has the rheumatics in him a long time, and torments me terrible of nights. If I had had him slewed off, I would have been much more thought of now; I'd a had a penny a day more pension, and that would have been more use to me than my leg, a precious sight; he will never be no good to me as long as he's on, and that's the very identical."

"But what luck have you had with the fish to-day, Uncle?"

"Lord, sir, I have been out since four o'clock this morning, and ain't caught a pennyworth."

"O' course he ain't" said old George; he's been shifting about all the time, but he's a goodhearted old man; he never hurt a worm in all his life, unless it was to put her on a hook. Here Uncle, the gentleman says, will you have a drop of grog?"

"Thank ye, my son, I am terrible dry.* But I ain't got nothing to put the liquor in: never mind, here's my lug pot,† that will do." So the old man produced an old tin mug, one mass of rust. He threw out the lug

* I frequently saw this poor dear old man afterwards. He used to watch for Robinson Crusoe and myself going out fishing at "the wracks" and used to pull alongside. He always called me "my son."

† Lug. The lug-worm, used for bait.

worms, washed the cup in the sea, and drank up the beer, smacking his lips after it.

"Did you ever eat a lug, Uncle?" said I.

"Lord, ay, my son, to be sure I have. They are as bitter as soot, if you eats 'em raw, but they are as sweet as sugar if you cooks 'em. I knows it, because I've eaten many a one when I cooked 'em in the fish."

The old man seemed impatient to be off, so we gave him a little money to buy himself some tobacco, and away went the poor old fellow back again into the harbour. May good luck follow him!

"George," said I, when the old man was gone, "did you ever ride on horseback? We will give you a job in the 2nd Life Guards if you like."

"Me ride! Lor sir, I am terrible frightened of a horse, more than I am of a Bengal tiger; I never was on a horse but once in my life, and then I fell off, and got a lump on my forehead as big as a coker nut. I'd sooner sit on a ship's truck in a gale of wind than I would on a horse. There's fish in the sea, little fellows as got heads for all the world like a horse, and prances about with their flippers just the same as a horse prances: they brings 'em up sometimes in buckets off Jersey.* There's things they call sea horses as well, up away round the Horn; ugly things as big as elephants, with great teeth

* The Hippocampus.

under their chins. They are quiet enough unless you comes foul of 'em and molestes 'em; but if you knocks 'em over the nose they are done for directly. They are no sea horses, they are walruses, and a walrus is a walrus: they lives on the ice along with the seals and bears and a precious set of ugly varment besides."

"Did you ever come across any pirates or smugglers, George, in the course of your travels?"

"Well, sir, I have been out a pirate-catching once or twice when I was aboard the 'Naiad' frigate, with Captain Spencer. There's a wonderful sight of pirates in the Mediterranean. What pirates we did not kill, we sunk; they shows you no mercy, and we shows them none; we kept any one what was any good, but them that was any good was as scarce as birds of paradise. A cowardly set of vagabonds is them pirates: a British sailor detests a pirate; he will either hang him or sink him."

"But how about the smugglers, George?"

"Oh! I knows something about them chaps. One night when I was out, close handy here, a pout-catching off the 'Boyne' wrack, I sees two men in a boat cruising about backwards and forwards: so they comes alongside, and says, 'What are you fishing for, old man?' 'For what I can catch,' says L. 'Do you ever catch any double-headed mackerel about here?' says they. 'There's somebody watching you on the Castle with a

spy-glass,' says I; 'you had better cut and run. I knows what's what. I arn't *quite* such a fool as I looks.' So presently, off comes a six-oared cutter, with the coast-guard's men. And the captain of her says, 'Where's the buoy's chain lay, Robinson Crusoe?' 'Right under the buoy,' says I. So they weighed the chain then and there, and they got eighty-five tubs of spirits as had got foul of the chain. The owner of 'em know'd this before, but the preventive men never know'd it, and the owner has got hisself, fool as he was, to thank for showing the Custom-house officers where they was;—laying a hovering round the wrack, like a gull over a dead whale."

It is some time now since I saw good old Robinson Crusoe. But I should like to tell the reader the last I know of him. I invited a friend in the 1st Life Guards to go down and have a day or two's fishing with him. So I wrote to Robinson Crusoe, to say we were coming, and to tell him where to meet us. What was my horror, when I introduced my friend, to find that Robinson Crusoe had been to the barber's, and had his hair cut, and beard shaved. He had also got a clean shirt, and a new suit of clothes, so that he was quite spoilt as regards his Robinson-Crusoe-like appearance. I was much pleased to find that my writing about him had done the old man good, for he told us that one day a lady on board a yacht hailed him, and asked him if he was

Robinson Crusoe that Mr. Buckland had papered. When the lady heard that he was Robinson Crusoe, she ordered him to go down and get his dinner with the men. When he came on deck again, the lady presented him with a new boat that belonged to the yacht, and told him to take it away there and then. Robinson Crusoe was very grateful, and as proud as possible of her; but still he would not use her, preferring to go out fishing in his rotten old bit of a tub, which, as I have stated before, cost one sovereign seven years back.

Robinson Crusoe came out to us, on our second visit, in his old boat, and my friend and I determined we would get hold of it somehow, or the old man, (though he had a new boat), would continue to go out in her till one day she would fall to pieces at sea and drown him. After a deal of trouble, we got Robinson Crusoe to accept a price for her, about ten times her value. The bargain concluded, we hauled her up on the beach, and taking a run, my friend and I simultaneously gave her sides a good kick. This was quite enough: she fell to bits like an orange box; and with a big stone or two, we soon broke her into pieces so small that even Robinson Crusoe could not put her together again. While we were doing this, the poor old fellow turned his back upon us. Tears ran down his manly, weather-beaten face as he sadly looked on at our work of destruction.

"Don't ye behave cowardly towards the poor old thing, gentlemen," said he; "she has been a good servant in her day, and I wants the copper nails out of her, for she is true copper fastened."

We left our good old friend picking out the copper nails, and singing to himself the following Tennysonian ditty—

And as a token of true love,
Her gold ring she broke in two;
One half she gave to her own true love,
The other she sold to a Jew.

I strongly advise visitors to Ryde or Southsea, who wish for a good day's sea-fishing, to engage Robinson Crusoe. His address is—George Butler (Robinson Crusoe), "The Lord Nelson" public-house, Gosport.

VISIT TO KNARESBOROUGH, YORKSHIRE.

IN September 1863, I obtained leave of absence from my medical duties as Assistant-Surgeon of the 2nd Life Guards, and made the town of Knaresborough my headquarters during my short holiday. At first sight, Knaresborough did not promise at all well, but eventually I found that there was "sport" to be had, as the following few pages will show.

My first visit was to the well-known Dropping-well. I entered the enclosure where it is situated with a certain amount of fear, lest I myself should in a moment be converted into stone by this modern wholesale statue-maker; but I summoned up courage, and knocked at the door. It was opened by a civil Yorkshire lassie, and we saw before us this natural curiosity—a massive frowning rock, over which a perpetual shower of water fell incessantly, with a musical and somewhat melancholy sound, into the clear pool below. About half-way down, on the face of the rock, were suspended a number of curious-looking objects. I asked the girl to explain

them. Pointing to them, she at once began with a true Yorkshire accent and with wonderful volubility of tongue—

“There you will see a pumkin and a stocking—a squirrel and a stock-dove—a small hotter, and a nedgeog (hedgehog)—a branch and a pheasant—a man’s hat and a sponge—a moss basket and a bird’s nest—a weasel and a wig.”

“For goodness’ sake, my girl, gently, gently, give us the list over again,” but she was gone, other visitors had knocked at the door; they also came down to where we were standing, and the girl began again, “a pumkin and a stocking, a small hotter and a nedgeog” down to the wig at the end of the sentence.

“Where’s my dog?” said my friend.

“He is gone,” said the girl. “We wants a curly dog, and if I catch him, I’ll just hang im oop in t’well and petrify him.”

Poor Brittle had evidently taken warning from the fate of the “small hotter and a nedgeog,” and had fairly bolted for it, his tail between his legs, lest he should be “hung oop” and become petrified.

The girl did not seem to know much more about the well than the names of the things hung up to petrify, so we left her and looked about for ourselves.

The rocks about Knaresborough are composed of magnesian limestone, and the lime becomes dissolved in

the spring water—so highly charged, indeed, is it with mineral matter, that in a gallon of water there are of carbonate of lime 23 parts, sulphate of magnesia 11 parts, and sulphate of lime 132 parts, and a pint of it weighs 24 grains heavier than one of common water.

The water seems willing enough to get rid of its mineral burthen, and anything, therefore, placed within its reach, so to say, it converts into stone. The owners of the well have taken advantage of this fact, and hang up miscellaneous objects which are ordinarily supposed to be converted into stone. This is not, however, actually the case; they are merely covered over with a coating of stone-like material, which, of course, takes the form of the objects which it encrusts. I have now before me a moor-hen and a "nedgeog" from the well at Knareborough. The form of these creatures is not, as may be imagined, very well preserved. The hedgehog reminds one much of the hedgehogs made of sponge-cake which one sees in the pastrycook's shop. I have made a section of my fossil moor-hen, and found the stony coating very hard indeed, and much like in appearance, as indeed it is in composition, to the fur which is found inside ordinary tea-kettles. The feathers, bones, &c., of the bird have almost disappeared from decay. The cast, however, of it is accurately taken by the deposit from the well. I have also a wig, but this is a terribly

shapeless mass, and very fragile.* In the show-room of the hotel by the inn are many really beautiful specimens of incrustations, particularly the birds'-nests and a pheasant, of which the form is accurately preserved. There is also a badger, which would form an excellent museum specimen, for the traces of the rough hair are distinctly perceptible, even though it is one solid mass of stone. I have also a birds'-nest or two—thrushes, linnets, and other small birds—the eggs in them. Both eggs and nests are hard and solid—in fact, a perfect mass of heavy stone, and very pretty ornaments for the drawing-room they are. I have broken one of these eggs, and find the egg-shell bright and white inside its stone-like cover.

We crept about under the deep ledges of the rock, and found ample proofs of the wonderful Medusa-like power of this water. A mass of leaves, moss, sticks, &c., had evidently, at some time, been blown together by the wind up in the corner where we found them. We could see the individual leaves, moss, branches, &c. as plain as though they had just been brought there, but when I attempted to remove a leaf—no; it was hard,

* My father, the Dean, frequently told me that he had an old wig, the property of the late Archbishop of York (Harcourt), in the attics of the Clarendon Museum, and that one day it was to be put in his museum. On the Dean's death we looked for it everywhere but could not find it. The Archbishop's wig had been sent to some dropping well, possibly Knaresborough, to be petrified.

firm, fixed as solid as a wreath carved on a marble tombstone. A most beautiful group of natural objects was this; and much more striking than the hideous outstretched and deformed worsted stocking we saw hung up under the well.

This process of nature-casting has been taken advantage of by the art-loving Italians. At San Filippo, between Rome and Sienna, there also is a dripping-well; but the deposit in this case is white, like marble. The proprietors, wishing to turn this natural-manufactory to account,* "have placed under the drip moulds and medallions of antique heads, figures, &c., made of sulphur. The water, careless of results, artistic or not, has deposited carbonate of lime on the mould to the thickness of half an inch or more, taking a most beautifully accurate cast of the figure *in rilievo*, the surface being very smooth and polished, answering to the surface of the sulphur. This deposit goes on so gradually, and with such minuteness, that even the lines in a delicate wood-engraving have been accurately moulded, and we have the picture in hard, solid carbonate of lime, instead of thin, perishable paper. If we reverse one of these stone pictures we shall find that the outside layer is exceedingly rough and indented, the results of the water dripping from the well." I have a case containing a

* I here quote from my "Curiosities of Natural History." Second Series.

number of these beautiful casts, brought by the Dean from Italy, and they are, I believe, almost unique in this country. I wish the worthy proprietor of "The Mother Shipton," the hotel at Knaresborough on the grounds of which the dropping-well is situated, would take the hint above given, and endeavour to cause his well to set to work, and become a candidate for a prize in the School of Design department of the South Kensington Museum. In my First Series will be found an account of the "Sunday Stone," a curious natural Kalendar manufactured in the drain-pipe of a coalpit.

A ROMAN RACECOURSE.

THE DEVIL'S ARROWS AT BORO'-BRIDGE.

DURING my stay at Knaresborough I made an excursion, under the friendly guidance of Mr. Blenkhorn, to Boro'bridge. Among the numerous most interesting remains of that ancient Roman station, the "Devil's Arrows" stand pre-eminent. They consist of three enormous blocks of stone, which are found in a field close to the roadside, about a quarter of a mile from the town of Boro'-bridge. The most northern arrow is 18 feet high, and 22 in circumference; the centre 22 feet high, and 18 in circumference, and of a square form; the most southerly is about a match to the centre one. They all lean a little towards the south-east and have been decidedly squared by human hands, but no marks of the chisel are now to be seen. They have been said by some to be of an artificial composition; this is not the case. They are blocks of natural millstone grit, a kind of stone which may be described as hardened sand, thickly studded with small bits of quartz, reminding one of a sago pudding suddenly converted into stone. They

exhibit curious gutter-ridges at the tops and down the sides, probably caused by the effects of wet and rain during the many hundred years they have been exposed to the storm and tempest. They are, in fact, huge giant stones, erected by a people long passed away. Their mysterious aspect, in their grim and silent solitude, makes the spectator regard them with a species of reverence and awe, which it is not easy to overcome. Now, the question arises, *who* put these stones in their present position, and *why* were they so placed? At the present time they stand in solitary grandeur, and are, to modern eyes, "apropos to nothing in particular." Some folks will tell you that they are monuments of victory, erected by the Romans; others, that they are the work of ancient Britons, and were part of a temple used by the Druids. The common people, of course, have a legend, and ascribe them to Satanic influence,* for every great work of unknown origin is, by the unreflecting, invariably attributed to the Devil. He has been blamed, or rather praised, for building bridges and other useful erections in different places, and that, more often than not, in a single night. On this occasion "meaning mischief," so says the legend, he took his stand upon How-hill (about seven or eight miles from this place, and near to Fountains Abbey), planted one

* "History of Boro'-bridge." 1853.

foot firmly on the front of the hill, and the other on the back part, made a short declaration of his intentions in the genuine dialect of Yorkshire, thus —

Borobrigg keep out o'th'way,
For Audboro town
I will ding down—

and then, discharging his stone bow, fairly missed his mark, the bolts falling a mile short of their object—hence the name “Devil’s Arrows.”

There can, however, in my humble opinion, be no doubt as to what they really are, viz., the *metæ*, or goals (winning-posts, if you please), of an ancient Roman racecourse. With this idea in my head, I stood upon the top of a gatepost and looked round, and with “half an eye” I perceived that, if the hedges were removed, there would be a famous bit of galloping ground round these pillars; in fact, my wonder is that the Yorkshiremen of the present day, with their love of racing, do not use this spot even now as a racecourse. The course reminds me somewhat of Ascot, there being a rise in the ground at a distance just convenient enough to make the “run-in” of a good race more interesting.

As I stood on the gate, I could not help wondering if the day would ever come when *our* grand stand and iron chains and pillars of Ascot or Epsom racecourses would be dug up by some New Zealander who, standing, as I

did, on the top of a gate, would wonder how the "Ancient English" managed their races! That these curious "Devil's Arrows" mark out an ancient Roman racecourse may be, I think, further argued out as follows. Aldborough, which is situated close by, was a Roman station—Isurium of old—of great importance in Roman times. That it was much frequented by Roman "swells," can, I think, be proved by the numerous Roman tessellated pavements—only used by people of opulence. Now these fine old Romans were naturally what we might call a "sporting set," and had their race meetings just as we English people do now. Being Yorkshire Romans they must naturally have imbibed the love of horses and horse racing, which I believe is natural in the air of this celebrated county; and is thoroughly transfused into the blood of the Yorkshiremen of the present day. Now how could the Roman nobles and country gentry living near the county town Aldborough, and in the garrison city of York, have amused themselves better than by race meetings; and where could there be a better racecourse than in the fields close by the town in which the "Devil's Arrows" now stand? And be it here remarked, that the course marked out by these stones is as near as possible (as I am informed by Mr. Lawson of Aldborough) of the same measure as the well-known course at Rome, viz., 606 feet.

I shut my eyes to everything around—

Look back—look back—look back, these thousand years !

I imagine a Roman Derby-day, the grand stand—the *spina*—the Roman ladies assembled, all looking on at the fun, while their attendants held up umbrellas or parasols to keep off the sun—Decimina—Socia Jun-cina—Aurelia Censorina—Simplicia Florentina—Ælia Severa—Flavia Augustina—I get their names from their very tombs now in York Museum—their hair decorated with *jet* ornaments, their garments of velvet or plush ornamented with crimson or purple stripes—their necklaces of yellow, green, and blue glass and of coral and blue glass—their carrings of fine twisted gold wire—their bracelets of bronze—their brooches and hair-pins of mosaic work—beads strung on fine silver twist—all gay and pretty. The reader may ask how I can describe with such confidence the costumes of these Roman ladies. The answer is, that these ornaments can all be seen in the Museum at York, alas ! no longer on beautiful ladies, who must certainly have worn them, but in glass cases as curiosities.

And then, to use a modern expression, “among the distinguished company assembled I noticed” the Roman officers Quintus Antonius, Isauricus—Antoninus Pius—and Marcus Nonius, of the legion Augusta; Aurelius Superus—Claudius Hieronymianus—and Cæresius,

Centurions of the sixth legion, quartered at York; Augustus Germanicus Dacius—and Lucius Duci-
us Ruffinus, Standard-bearer of the ninth legion; with Titus Perpetuus, a rich civilian; all come over from the Regimental head-quarters at York.

The Colonel of the regiment in his “essedum,” or mail phaeton, the cornet in his “cisium,” or dog-cart, were also there to see the races.*

These noble Roman lords and ladies, and doubtless, many of the private soldiers, I saw in my midday dream all assembled eager to view the race of the “*bigæ*” or pair-horse chariots, or the contest between the four-horse teams, the “*quadrigæ*.” Also the coachmen, the “*agitatores*,” standing on the floor of the chariots, *inside* their reins, to enable them to throw all their weight against the horses by leaning backwards. The cards of the races, the “*libellæ*,” the “*actuarii*,” the gentlemen of the press; the colours of the drivers—“*factio*”—“*prasina*” (green), “*russata*” (red), “*veneta*” (purple), “*albata*” (white). The starting-post, the “*alba linea*,” the starters, the “*moratores*,” the race-cups, the “*bravia*.” *

* Roman Officers in those days were probably as great patrons of the racecourse as English Officers are in our days. I get their names from the votary altars and massive stone tombs in the York Museum; that their regiments were quartered at and about the city of York is well known to antiquaries.

Sacri tripodes, viridesque coronæ,
 Et palmæ, pretium victoribus, armaque, et ostro
 Perfusæ vestes, argenti auriq̄ue talenta.*

The cards of the races, "*codices*;" the gipsies, "*ambubia*;" the shouting of the people to clear the course for the jockeys; Priam, the young Chifney of the day, riding the favourite, a roan grey with white legs.

Quem Thracius albis
 Portat equus bicolor maculis, vestigia primi
 Alba pedis, frontemque ostendens arduus albam.†

The other jockey-boys, the light-weight "Atys," and then "Ascanius," riding a fidgety Sidonian Arab horse, of the breed so much prized by the fair Queen Dido; and the ruck of race-horses, half-Roman half-Yorkshire bred—it may be the very ancestors of our Life Guard troop horses—all mounted by jockeys who *wore spurs* (for there is a spur in Mr. Lawson's museum, at Aldborough). They start at the sound of the trumpet.

* Green laurel wreaths and palm the victors grace:
 Within the circle arms and tripods lie,
 Ingots of gold and silver heaped on high,
 And vests embroidered with the Tyrian dye.

† New honours adding to the Latin name,
 Right well the noble boy his Thracian steed became
 White were the fetlocks of his feet before,
 And on his front a snowy star he bore.

Ubi clara dedit sonitum tuba, finibus-omnes,
Haud mora, prosiluerunt suis.*

Truly, what a scene this must have been! The "odds"—the shouting—the betting—the Babel of a thousand tongues, talking Latin with an accent which *we* never have heard, and never shall hear, and never can hear. The rise of the ruck of the racing chariots whirling in a dust cloud over the brow of the hill.

Aurigæ undantia lora
Concussere jugis pronique in verbera pendent.†

The steering of the chariot drivers round the biggest of the "Devil's Arrows," the bang and crash of the chariot-wheel against it, the sparks from the crushed tire against the hard-stone, the coachman upset—stunned, and prostrate among the tangled harness and kicking horses—

And the whirlwind race is over his head,
Without stopping to ask if he's living or dead.

The cry for the Assistant-Surgeon of the Ninth Legion,‡ who, of course, was present at the races in the "Har-

* The clangour of the trumpet gives the sign:
At once they start, advancing in a line.

† The fierce driver with great fury lends
The sounding lash, and ere the stroke descends,
Low to the wheels his pliant body bends.

‡ The Roman Life Guard officers doubtless took their doctor to the races as do the English Life Guards at the present day. Many a pleasant day have I spent on the regimental and private drags of my brother officers.

mamaza," or Regimental drag, from York ; the queer surgical instruments and ointments !

Who would not indulge in such day-dreams as these ? who would not visit the " Devil's Arrows," and in his imagination paint a Roman Derby-day ? *

Where are all these right brave Roman, officers and soldiers now ? where are the beautiful Roman ladies ? Gone ! gone ! the pillars of their racecourse alone remain. As for *themselves*,

Their bodies dust, their arms are rust,
Their souls now lie in peace, we trust.

* In a paper lately read by Mr. William Hennessy at a meeting of the Royal Irish Academy, it was stated that as early as A.D. 60, chariot-races and games were celebrated on the Curragh of Kildare. The Curragh has been a common, the writer showed, since the year 484, and horse-racing was introduced upon it in A.D. 260.

A YORKSHIRE FISHING MATCH.

WHEN walking through the streets of Knaresborough I saw a bill in a shop window announcing that the "Thirsk Mowbray Vale Angling Association" would hold their annual angling match in the river Swale, on Tuesday, September 22. The rules, also, were given, viz., that "only one rod and one hook were to be used; every angler to bait his own hook and land his own fish; the places of fishing to be chosen by lot, and no one to put his rod together till the pistol fired," &c. &c.

Accordingly, I immediately entered the shop, and being determined to see the fun, paid my entrance of 2s. Early on the morning of the match I found some five-and-twenty jolly anglers, true and good men, natives of Knaresborough, all waiting at the station anxious to start. The train came up, and away we went for Melmerby station, the match being about to be held at Shipton-on-Swale. Just before we arrived at, and while passing Ripon, it began to (as the Yorkshiremen have it) "part rain," and the weather to be decidedly "soft"—in other words, it poured in torrents, and into this

drenching wet we turned out for a walk of four miles across the fields to Skipton Bridge, the head-quarters of the angling match. It was great fun to see the various wet-weather costumes of my friends; most of them, indeed, carried umbrellas strapped to the rods, which were got out and hoisted with wonderful celerity. During the walk the anglers, though heavily weighted with tackle, baits, &c., were as lively and merry as possible, and many a story was told, as for example :

“ A keeper strolling one day by the side of a stream, with his ‘ Bull and Terrier ’ dog at his heels, came upon a man who was intently fishing for pike, one of which he had just landed and which was then jumping about on the grass, not at all comfortable, and in about as bad a humour as it is possible for even this surly fish to be.

“ ‘ Hollo,’ says the keeper, putting on as simple an appearance as he possibly could, and eyeing the fish with a sort of curious gaze, ‘ would that fish bite now ? ’ ‘ I don’t know,’ says the angler, diligently plying away, ‘ you can put your finger in his mouth if you like, and try him.’ ‘ Oh, no,’ says the keeper, drawing back, ‘ but I’ll try my dog’s tail, if you don’t mind.’ ‘ Not at all, I shan’t feel it,’ was the reply. Accordingly, having caught his dog, he put his tail in the pike’s mouth. No sooner did the pike feel the tail than he took hold, fixing his sharp teeth deeply into it; the dog immediately ran

off at his hardest, singing 'Pen and Ink,' and made his way home as fast as his legs would carry him. At this the keeper laughed heartily; not so the owner of the fish, who sang out in his loudest voice 'Oh, I say, Mr. Keeper, call back your dog, will you.' 'Not I,' says the keeper, walking away; '*you call back your pike!*' "

Then another angler told us how that a Yorkshire barber,* notorious for his excessive politeness, while shaving a rustic customer by candlelight, dropped the burning wick of the candle into his ear. "You're burning mee lug," said the indignant rustic. "Oh, thank you; sir! oh, thank you, sir!" answered the barber. Another customer went to sleep while operated on by the same barber, who said. "Good-night to you, sir; pleasant dreams to you, sir;" and then sent in his wife "to charge for the gentleman's bed."

As we went along, our ranks soon began to thin, and the rear-guard was formed by myself, with a terribly heavy basket of tackle, because I was told the fish in the Swale were "trout, cheven (chub), roach, eels, perch, barbel, carp, dace, gudgeon, jack, bream, burbolt, and all sorts" and not knowing what I might find, I had tackle ready for "all sorts." My friend, Mr. Houseman, was loaded like a Pickford's van—rods, landing-net,

* This poor man, since this was written, was accidentally thrown from his horse within sight of the "Devil's Arrows," and alas, killed on the spot.

umbrella, macintosh, worms, paste, brandlings, dew-worms, wasp grubs, lines, reels, bullets, split shot, beasts' brains, and "mawks," or gentles, which Mr. H. had that morning discovered in a hare which was hanging in his larder, so that, as he observed, "he and his fish took the same bait." He was determined, like myself, to win the match if *tackle* would do it; so heavy, indeed, was his tackle and himself combined, that on our return home we weighed him at the station, tackle and all, and found that he turned the scales at several pounds over two hundredweight. The fish in his pocket must, however, be deducted for the sake of fairness, as *they* weighed 1lb. 6oz.

At last we arrived at Skipton Bridge, and met other parties of anglers from York, Leeds, Thirsk, Hampswaite, Boro'-bridge, Knaresborough, Thornton-le-Moor, Sheffield, London, and other towns, also on the march to head-quarters. "Where do we go?" we asked of an old woman. "To t'house oop yon, at t'top of t'hill, there's a terrible cloud of folks at t'door." It was "a cloud of folks" indeed—a regular mass of anglers, all clustering round the door of the little public-house, just like a swarm of great black bees that had umbrellas for wings. The drawing for places was going on inside, the tickets being taken out of a beer jug and handed out of the window to the expectant anglers.

At last my number was called, and off I went to the

river, and a queer sight I saw. The whole of one bank of it was regularly marked out with white pegs twenty yards apart, every peg having a number affixed to it. The angler who had the corresponding number was obliged to use his allotment, and no other, as his fishing-ground. Reader, imagine 135 anglers in a row, reaching *about one mile and a half in total length*, all expectation and all anxiety to begin operations in their respective allotments, from each of which, with hardly any exception, a little cloud of tobacco-smoke coiled upwards into the damp and drizzling atmosphere.

At last, about eleven, bang! went the pistol in the distance, off came the rod coverings, and rods soon began to project into the river like the horns of a lot of great snails, the snails themselves being represented by the angler crouching in a mass under his umbrella. I never in my life saw more promising "swims" for fish than in this river. These, however, only occurred every now and then; and, of course, many anglers drew frightfully bad places. For instance, a friend who came with me soon left off trying for a prize because his "swim" was one thick hedge of tall willows, which he could not possibly *see* over, much less fish over. Mr. Houseman had a swim consisting of a shallow some two feet deep, and one solid mass of tangled weeds. The moment the fishing began, all chatter and noise ceased along the line, and one might have imagined "the fishers" (as they

call them in Yorkshire), to be a lot of herons, so silent and quiet were they. Just at this moment a gamekeeper and his dog came up on to the bank on the opposite side of the river. I do not know which looked the most astonished, the man or his dog, at the sudden apparition of this long line of silent and motionless men. I myself had drawn a ticket, a capital allotment, with one nice little swim in it, about the size of a dining-table, from which I expected great things. Tackle is often perverse when one wishes to be more than usually careful. My tackle on this occasion was particularly obstinate and disagreeable—knotting, tangling, breaking, and in the most uncivil manner refusing to act. The very first cast I got foul of an immense branch that had chosen my swim as a resting-place, and in getting it out, I of course frightened every fish away from my twenty yards; add to this the pouring rain, wetting one's tackle-books in the most painfully provoking manner, and it is not to be wondered at if I began to despair.

I waited a bit, and thought to myself, "Oh, these Yorkshire fish ain't up to snuff like the London fish;" but sad experience showed me that the Yorkshire *fish* are as sharp as the Yorkshire *men*. There must be something in the air of this celebrated county that puts an edge on to the wits of man and fish, for not a single bite, even from a minnow, could I get. So I asked my next-door neighbours how they were getting on.

They were in the same plight as myself. One of them had caught "an old woman's wig" (a bit of weed), and the other a lot of thatching-pegs, but no fish.

At length, after about an hour's silence, Mr. Houseman—who was the very last on the line, and a long way off—broke the silence and quiet by shouting out, at the top of his voice, "Tommy Parsee." Another fisher answered with a laugh, and also as loud as he could bawl, "Tommy Parsee." The word passed up the line, and everybody shouted, "Tommy Parsee." I have, after diligent and severe investigation, discovered that "Tommy Parsee" is Yorkshire for a little fish called prickle-back, and imagine that it is a Yorkshire fisher's war-cry, and that when he utters it he means he has no sport. So we fished and fished, but no bites. At last, bob-bob went my float—"I've got him!" cried I; and up came a small roach, and immediately after another *still smaller*. I placed them on the bank, and my neighbour informed me that I was now *sure* of a prize—a man at the last yearly meeting getting a second prize for two ounces and a half. So I took matters easy, and laid down my rod, and took a walk (contrary to the rules, by the way), to see what others were doing. I found most of the anglers fishing with a ledger—not a great heavy ledger, like the London barbel-ledgers, but one or two big shot on the gut just enough to sink the bait. Floats, too, were used; but such tiny

floats! Just the cork of a small phial physic-bottle, sharpened at both ends, with a cut in it into which the line can be slipped. These Yorkshire fish are either so scarce, or else so knowing, that it requires the finest tackle to induce them to be caught. Most of the rods I observed, were spliced, not jointed rods. They were nearly all painted green, and Nottingham reels far predominated over brass reels.

In about two hours, other anglers, who had bad places or who could get no sport, came wandering by.

"What thou got?"

"Nought; nought."

"You're too keen, you're too keen, munn; you strike too hard; I myself ain't had a smell, much less a nibble, all day, and I've gee it oop."

Then came by "The Wandering Jew," a drunken angler—the *only* misbelaved man, by-the-way, of all the large party—who had waited so long in the public-house for his ticket that he had got too much beer aboard. He carried all his tackle anyhow, like a bundle of sticks, and lugged along a huge landing-net, into which he every now and then put his foot, and came tumbling over, like a shot hare. He said "he wanted his place, which was No. 24, and that he had been all day looking for No. 24, and everybody said there was no 24; but *he knew* there *was* 24, and if he walked all day he would find it." He then claimed 115.

which he swore was 24. He came bothering up to Houseman, who declared, if he did not stop his noise and clatter, he would put him on his hook and fish with him.

Then came down a man with a report of what they had been doing at the other end of the line; he told the tall, thin old gentleman from Thirsk, who stood tiptoe on the very verge of a very soft mud-bank, and who fished as if his life depended on the result, that *somebody* had caught fish amounting to 6lb. weight. The old man, who was getting the best sport of all in our quarter, opened his eyes wider than they were before, but went on fishing with redoubled silence and quiet. I expected every minute to see him topple into the river, so eager was he to win the prize cup. He did not seem inclined to answer the many queries put to him, his only response was, "Grubb for chubb, grubb for chubb."

I myself caught two more little thin roach (I *did* get a prize of a small red tobacco jar for fish weighing altogether $7\frac{1}{4}$ oz. The highest prize was for fish weighing 4 lb. $6\frac{1}{2}$ oz.); and then, as the time of pistol-firing—five o'clock—got near, and I had fished since eleven, I left my allotment to see the "weighing in."

The pistol was fired when I got near to the far end of the line, and the "weigher-in" came by, with a pair of scales and a note-taker behind him. I also took notes.

The first man we came to had got his fish displayed on the grass.

"Into the scales with him. Name and number, sir," said the weigher—"3oz., sir." "Now for the next man"—"4 oz.;" "The next"—"2½ oz.;" "The next"—"6 oz.;" "The next"—"By Jove! it's a jack; he'll get the prize! no he won't, the jack weighs only 8 oz.;" "The next"—"1½ oz.;" "The next"—"½ oz.;" "The next"—"¼ oz." (a little dace); "The next—Is that all ye're got?" "Yes." "Weigh him, then." "By Jove he doesn't turn the scales *at all*." "Yes, he does. You've lost the prize, sir, he just turns the scales. You've rubbed him in the sand, sir, and made him heavier than he is naturally; if you had not you would have won the prize." "What prize!" said the man. "Why the prize for the *smallest fish*, sir." "Why if I knowed that," said the man "I'm dommed if ah would not ah fished for *small* fish all day long." "What fish is it?" said I, "let's look." "He is all covered with sand—what do you call him?" "Sithee munn, it's nought but 'a Tommy Parsee.'" "Thank goodness, then!" I exclaimed, "I *have* at last seen that mythical Yorkshire—what is it?" "A 'Tommy Parsee.'" * "Give him here; I must have him for my museum. What's the prize for him?" "Oh! it's a wooden

* A Tommy Parsee is the "Pope" of Thames anglers.

spoon," said the weigher-in, "generally, for the *smallest fish*; but I must take him up to the chemist's and weigh him, because I think a fisher down yon has got a *smaller*." We then came to an old man who was still fishing, sitting below a very steep bank, on a basket surrounded with an immense display of tackle and bait for himself and for the fish. Bread-and-cheese, beer, gin-and-water, wasp grubs, worms, pastes, &c., were all spread about him in great profusion; and every here and there an irate wasp came to reclaim her lost young robbed from her powder-destroyed nest. Our patient friend, whom we found still fishing (though the match had been over above an hour), was one mass of macintosh; it had been raining some three hours back—and he had a great sheet of macintosh bound like a tent-house over his "long-faced" hat.

"Yon youth's got glazed," said the weigher-in.
"Hi! weigh oop thee fish, munn."

The fisher turned round sulkily.

"I got nought, I got nought," said he, and went on fishing sulkily.

He rebaited his hook, and I doubt not may still be found in his fishing-box by the side of the Swale at this moment.

As we got further down, the weight of fish somewhat increased, though the *first* prize was obtained for 4lb. 6½oz. There cannot be many fish in the river, or else

they will not bite. I leave this point to be settled by philosophers. All being over, we again marched in line to the public-house. One of the anglers had caught a burbolt, which he very kindly, at Mr. Houseman's request, gave to me, and I delivered a clinical lecture upon it to a select party. While the anglers were collected in knots waiting the announcement of the rewards and prizes, I remarked that, though but very few had fish, *every* man had a landing-net. One fisher had a huge iron gaff, made by a village blacksmith. These landing-nets were all fixed permanently into a long handle, and the bottom of the handle had a piece of iron fixed into it exactly the shape of a boat-hook, viz., a spike and a crook; the crook is of great use for unhitching tackle from trees, and the spike serves to stand the net upright in the ground. I strongly recommend this addition to the landing-net to all anglers. As the 135 men were standing about in knots talking over the events of the day, the 135 landing-nets stood well in relief against the sky. They had the most curious possible appearance, reminding one of a party of New Zealanders with their clubs all ready for the assault at the sound of the war-cry, "Tommy Parpee."

It has been remarked by somebody who knows nothing about the subject, that the notion that fishermen are a pacific race is a mistaken idea. I, for my

part, can only say that on this very pleasant day with the Yorkshire "fishers" I saw great good-feeling and mutual friendliness and excellent behaviour among a large number of men of the most varied characters and dispositions; in fact, I have generally found that anglers are a peaceful and kind-hearted set of men. I have only one regret as regards the match in which I had the honour of competing, and that is, that there was not a prize for those who *had no bite*; but I fancy this prize was not offered, as there would have been too many competitors, for fifteen jolly anglers who were placed in a row, all showed blank returns, not one of them having had a nibble all day, much less a bite,—so that arbitration would have been difficult.

Such matches as these, I am sure, do the cause of angling and piscatorial fellowship much good;—and I shall certainly (if the London anglers support the notion) some summer endeavour to get up a similar match for Thames anglers. People get to know each other, and much fun and friendly chaff is elicited. Though the prizes were small, and in some cases laughable, it must be remembered anglers do not care so much for the value of the prizes, nor yet for the fish they catch, as for the encouragement of good feeling, and friendly emulation, and good fellowship among all lovers of the "gentle art."

So much, then, for the Yorkshire fishing match; and good luck to the jolly fishers at their next meeting!

The following miscellaneous lots were among the prizes given:

A handsome silver cup, value 7*l.*, a china breakfast service, a fishing-rod and basket, an electro-plated silver cup, a coffee-pot, a loaf of sugar, a coffee-kettle, a fishing-rod, a large basket and flask, half a dozen knives and forks, a landing-net with folding ring, a looking-glass, a prime cheese, a brass pan, hair-brush and comb, a pair of ladies' boots, a bible, a fishing-book, a leg of mutton, one pound of tobacco, one pound of tea, a meat-saw, a waistcoat-piece, a carving-knife and fork, a pair of wool shears, a bait-can, a metal inkstand, a packet of fishing-tackle, a photographic album, a tin tea-kettle, a basket, a wood reel, a brass reel, a pocket-knife, a tobacco-jar, a fancy basket; for the *smallest take of fish*, a line and fly-tweezer; for largest fish (21*lb.* 8*oz.*), a handsome wood reel.

COLLECTION OF CURIOSITIES AND ANTIQUITIES.

I HAVE always been a great advocate for the formation of local museums in country and market towns, and this because there is hardly any town in England which has not some local antiquities and curiosities, which, if exhibited at stated times and occasions, could not fail to cause a general interest for the folks about the place, and would tend to heighten the standard of intelligence among the rising population, and be of the greatest interest to strangers. I was very much pleased, therefore, to find that an exhibition of this kind was opened in the Town-hall, Knaresborough, when I happened to be there. The Clergy, the neighbouring gentry, and the townsfolk had sent to this exhibition such relics, antiquities, pictures, and objects of natural history as they happened to have ; and the result was, an exhibition of the works of science and art far above the standard of what one would expect to find.

Knaresborough is a very ancient place, and some antiquities of the highest interest and value were

exhibited. First, then, I saw a very remarkable stone image (about the size of a small sugar-loaf), which was one of the household gods of the "Brigantes," the tribe of ancient Britons who were found in Yorkshire and its neighbourhood by Julius Cæsar, and who had their capital at Aldborough, near Knaresborough. This god is simply a rude figure of a human being, carved in hard stone, and is certainly very curious.

Close to this image was a case containing the registers of the parish. One volume is in excellent preservation, and contains, written in old English characters, a list of births, deaths, and marriages in the third year of Queen Elizabeth, 1561. Then we find the parish registry for 1640, which was the year Knaresborough Castle was besieged by Lilburn, one of Oliver Cromwell's generals, and knocked into the ruins it now presents, Dec. 20, 1644. In this register we find the names of several of the soldiers who were killed in the siege of the castle, and buried in the churchyard—thus: "One souldier under Captain Washington; item, one other souldier, under Captain Atkins." Some of the writing is exceedingly beautiful—I wonder how they made their ink in those days, for in this book it is as black as japan varnish—and is evidently the penmanship of one Abraham Rhodes, vicar of Knaresborough. It extends over several pages. The last entry being May 25, 1642 it is evident that Mr. Rhodes died about that time,

for a fresh and very inferior handwriting appears, and the third entry it gives is "Buried Abraham Rhodes, vicar of Knaresborough, June 17, 1642."

This same book gives us evidence of Cromwell's interference with the Church, for one Roger Atey is instituted and inducted July 5, 1642; and the 23rd of June, 1645, Matthew Booth is *substituted*: the meaning of this is that Booth was a Puritan. Atey had been examined by the "Committee of Tryers," and, being found wanting, had been displaced for the Puritan Booth.

In the same case was a fine copy of the "Sealed Prayer Book," dated 1662, and it contains the "Healing Service"—that is, the service used when the King "touched for the evil." The lesson is Mark xvi. 14, and at the words, "They shall lay hands on the sick and recover," the instructions in the margin are, "Here the infirm persons are presented to the king upon their knees, and the king layeth his hands upon them." Then follows the 1st chapter of St. John. At the words, "Bear witness of the light," the note is, "Here they are again presented unto the king, and the king putteth gold about their necks." Prayer-books containing this "Healing Service" are very rare. The last monarch who "touched for the evil" was, as Mr. Ramskill informs me, her Most Gracious Majesty Queen Anne.

There was yet another most curious book, exhibited by T. Collins, Esq., M.P. It is "The Book of Fools. 1570," showing the folly of all states, &c. (*qui Omnium Mortalium narrat stultitiam*). The frontispiece is a number of fools in a boat, and is a wonderful bit of ancient engraving.

One of the greatest local curiosities was a shirt. It is the very shirt that was worn by Sir Henry Slingsby at the moment of his execution on the scaffold, Oliver Cromwell having caused this brave and great man to be beheaded on the 6th of June, 1658. It is made of exceedingly fine linen, and there is a cut in the collar of the shirt which was made by the executioner's axe; there are also brown spots of blood about the sleeves and body. Sir Henry is buried in the parish church, and the black stone which forms his tomb was once the altar-stone of St. Robert's Chapel, now in ruins: it is called the stone of St. Robert. This relic of his ancestor was kindly lent by Sir Charles Slingsby, who lives at Scriven Hall, close to Knaresborough. There was also another curious shirt in the exhibition, but this was a *modern* specimen; it is woven throughout in one piece, and is perfectly seamless. It was made by one of the townfolks, W. Hempshall, a weaver; Knaresborough being famous for its weaving trade. It is certainly a most ingenious bit of work.

Another great local curiosity remains to be men-

tioned. Underneath a glass case were exhibited two of the leg-bones of Eugene Aram, who was tried at York in 1759, for the murder of Daniel Clark. He was convicted, and hung in chains near the town. Eugene Aram, whose story is well known through the writings of Sir E. Bulwer Lytton, was no common murderer; he was not found out till upwards of fourteen years after the murder. He was tried by Judge Noel, who remarked that "his defence was one of the most ingenious pieces of reasoning he had ever known." Parts of the brief used on the trial are placed by his bones.

Besides the above principal local curiosities, there was a large collection of articles from the Summer Palace of Peking, lent by the Rev. J. Fawcett; antiquities, objects of natural history, and valuable paintings, which space will not allow me to mention. The natural history collection—particularly the birds, the property of Mr. Garth and Messrs. Walton—was especially good, and, at the request of the committee, I gave, as my contribution to the exhibition, lectures on the birds, reptiles, and other examples of natural history which were placed in the cabinet.

Too much praise cannot be accorded to the Rev. E. J. Ramskill, now Rector of Trinity Church Knaresborough, for the way in which he got together and

arranged this exhibition ; and, as the proceeds went towards the funds of the new church, I was pleased to hear that the efforts of the Rev. J. Fawcett, the Vicar, Mr. Ramskill, and the worthy folks who had the management of it, were well rewarded.

KNARESBOROUGH CHURCH BELLS.

A FEW days after my Lecture on Fish Hatching at the Town Hall, Knaresborough, I was requested to give a second on the *curiosities* which had come under my notice during my stay at this pretty Yorkshire town. I endeavoured to find something that might possibly be new to my audience, a difficult task, as most of them were natives of the place. I believe I partially succeeded in my object, for having heard the beautiful peal of bells of the parish church so often echo and re-echo along the romantic cliffs which overhang the river Nidd, I bethought me that there *ought* to be some inscriptions on these bells, the nature of which might not be generally known. Accordingly my friend, the Rev. J. E. Ramskill, and myself, formed ourselves into a committee of inquiry, and clambered up into the belfry to look for inscriptions; nor were we disappointed, for after a somewhat perilous exploration among the bell-wheels and ropes, the oak rafters, the dust and dirt, the bats and owls, we obtained the following inscriptions, which I now have the pleasure of subjoining:—

On the first bell :

Our voices shall in consort ring,
To honour both of God and King.

On the second bell :

Whilst thus we join in cheerful sound,
May love and loyalty abound.

On the third bell :

Peace and good neighbourhood.

On the fourth bell :

Ye ringers all, that prize your health and happiness,
Be sober, merry, wise, and you'll the same possess.

On the fifth bell :

In wedlock bands all ye who join ; with hands your hearts
unite ;
So shall our tuneful tongues combine to laud the nuptial
rite.

On the sixth bell :

Such wondrous power to music's given,
It elevates the soul to heaven.

On the seventh (little) bell :

If you have a judicious ear,
You'll own my voice is sweet and clear.

On the eighth (big) bell :

John Inman, Joseph Young.
The Rev. T. Collins, M.A., Vicar, 1774.
" Procul este profani."

These inscriptions are all part and parcel of the casting of the individual bells, and are found round their *upper* part, and not at the edge, as is the case with many bells. On each bell was the name of the makers, "Peake and Chapman, London, 1774." Mr. Ramskill informed me that four of these bells were recast at this date, from the bells which came out of the Trinitarian

Priory, of Knaresborough, founded in 1218 by Richard Plantagenet, brother to Henry III. When the Priory was destroyed (the ruins still remain, and they are well worthy of excavation), in the reign of King Henry VIII., there were twelve bells in the abbey. They were thus distributed: Four to Kirby Malzead, four to Spofforth, and four to Knaresborough. Four new bells were added in 1774, to form the charming peal which must delight the ears of every visitor to this ancient and interesting place.

A ZOOLOGICAL AUCTION.

SALES of large animals, such as are generally kept in menageries, are not very common in England; but I was once lucky enough to be present at what may, in the strictest sense of the words, be called a zoological auction. I have been present at auctions of many kinds; I have seen a single gold coin,* the size of a five-shilling piece, sold for two hundred and sixty-five pounds at Sotheby and Wilkinson's; I have seen a fossil sprat sold for as many sovereigns as it had ribs;

* I wrote to my friend W. S. Vaux, Esq., of the British Museum, to know what this coin really was that I saw sold, and why it fetched such a high price. He kindly sent me the following answer:—"The coin you allude to is what is called 'the Petition Crown.' It was made as a pattern for the coinage of Charles II. by *Simon*, A.D. 1663, when he had been dismissed from his office of coiner, and a Dutch artist, Poettier, had been employed in his place. These 'Petition Crowns' are usually considered the gems of the English coinage, and as there are but very few extant (I believe about fourteen or fifteen) they always fetch a very high price when sold. We have in the Museum two specimens in silver, and one in lead. The latter is nearly if not quite unique. If you want to know more about them, you will find a good account of them in *Virtue's* works of *Simon*, Plate xxxv., Fig. 7, and *Evelyn's* 'Discourse on Medals,' page 239."

but I never was present at a more interesting sale than that held at the Surrey Zoological Gardens, when the whole collection of animals belonging to that establishment was brought to the hammer.*

It was a dull misty morning when I entered the gardens, some few minutes after the sale had commenced, and they looked the very picture of wretchedness. The model of Sebastopol, whose cannon once thundered simultaneously with the cannon of its prototype far away in the Crimea, was now silent; the wooden Zouave and the wooden Guardsman, wearied with the long siege, were standing at anything but "attention"—all was ruin and desolation.

Not far from Sebastopol the auction was going on; the head of Mr. Stevens, the auctioneer, forming a centre round which the crowd was collected. "Eight shillings for a wax-bill† and two cut-throat sparrows.‡ Yours, sir," were the first words that met my ears. "A paradise grackle§—nine shillings—thank you, sir. The next lot—a red and yellow macaw. No. There is some mistake—a yellow and blue macaw. What shall we say for this fine bird, gentlemen? Three pounds five—you have a bargain, sir. A sulphur-

* The sale took place in the month of November 1856.

† *Estrilda*.

‡ *Amadina fasciata*.

§ Common Indian house-maina, *Acridotheres tristis*, strangely named *Paradisæa tristis* by Linnæus.

crested cockatoo—two guineas—mind your fingers, sir; that lot is spiteful. The next lot—an armadillo—what shall I say for the armadillo, gentlemen? Ten shillings?—thirty?—yes, that's more like ~~its~~ value. A pair of flying squirrels—one pound—cheap as things go. Now for the snakes." There were only five snakes for sale, and these consisted of one boa and four pythons; the former came from South America, all of the latter from India. The boa was bought for five guineas, the others at prices varying from two to four pounds.

The sale was a peripatetic one, and the auctioneer, having descended from his chair, we all followed a man, who carried the chair in one hand and rang a bell with the other.

During the walk from place to place I had time to look about me at the company. There were about three hundred people present, who consisted :—firstly, of a deputation from the Regent's Park Gardens; then several professional animal dealers, from Liverpool and large continental cities, among whom was Mr. Jamrach, of Ratcliff Highway, before mentioned, one of the largest animal dealers in the world; then proprietors of shows, both great and small, from the Messrs. Wombwell and Maunder to your scantily clad man who owns the penny show, and who has just bought the smallest and the cheapest of the large serpents, to be shown to gaping villagers at country fairs; lastly, many who, like

myself, came to learn the value of an elephant or a lion. We, crowd of naturalists, therefore, the bellman showing us the place, halted in front of the aviary.

The first lot was two Indian falcons, which fetched two pounds ten shillings each. Then a pair of white (or rather whity-brown) storks—they sold for sixteen shillings. A black stork (being, as another black bird well known to schoolboys was formerly supposed to be, a rare bird) brought two pounds six shillings. Then followed lot fifty-seven, a pelican, a very amiable, or else a very hungry bird, for he kept jabbering with his great bill at the numerous gloves held out to him, and endeavouring to swallow them. Here a spirited competition began, and the bird was at length knocked down for eighteen guineas. In Egypt my friend Captain Cunninghame, late 2nd Life Guards, informs me he lately bought a much finer bird for two shillings, which makes me think seriously of speculating in pelicans. The reason why a pelican sells well is, that he is a good show-bird, and a good attractor of pennies. The poor bird is probably at this time shut up in some small cage, inside a house upon wheels, never again to behold his native wilderness, or, according to the showman, his master, pluck blood from his breast to feed his young ones.* A very common exhibition in travelling

* The stone slopes on the roof of Winchester Cathedral show the bird performing the operation. The origin of the idea is, I

menageries, where they have one or two pelicans, is to put a bucket containing fish at one end of the show, and then to allow the hungry pelicans to make a rush at the bucket from the other end; this is what is called "a Chinese goose race."

Next came the monkeys. Great was the rush to the monkey-house, which was speedily filled, but as speedily emptied again; for Mr. Stevens wisely took up his position outside, under cover of the wooden guns of one of the Sebastopol batteries. But though the folks were so anxious to see the monkeys, they did not seem equally anxious to buy; for the biddings were few and far between. The first lot was a Rhesus monkey (common in Bengal)—a fine name for an ugly creature. He was sold for twelve shillings, as also were two more of the same species. Then followed divers sorts of monkeys rejoicing in various names, such as "bonnet," "green," "sooty," "macaque," &c.; but none of them fetched more than ten shillings each; and one of the

believe, that the tip of the pelican's bill is red or orange colour, and when he is arranging his breast-feathers, a person ignorant of natural history might suppose that he was bleeding himself. Since this was written, my friend Mr. Blyth has suggested to me a more probable origin for the old story of the pelican feeding its young with blood from its own breast. In the breeding season, several of the species of pelican have a large and glistening pale orange, (deepening occasionally to ferruginous or rusty) patch upon the breast, which sometimes has conspicuously the appearance of a faded blood-stain, for which it might thus have been mistaken.

customers wanted Mr. Stevens to give him an organ into the bargain. Another wanted his monkey—a great savage Barbary ape—delivered *immediately*, which Mr. S. said he really could not undertake to do, but he would “be happy to receive the money for him on the spot.”

Away we went again after the bell and the chair, to the opposite side of the gardens. Here, two jackals were the first sold—twenty-four shillings the two. Then a pair of porcupines—good show animals again—eight pounds fifteen shillings. Then an Indian goat, one four-horned sheep, and one Indian sheep—only two guineas the three; cheap, at that rate, even as mutton. Then followed a red hind—(who nearly devoured my catalogue while I was looking another way)—for two pounds ten shillings. Then followed the sale of six eagles, namely, two golden eagles, a wedge-tailed eagle, a sea eagle, and two from Chili. These sold at prices varying from two pounds to thirteen shillings; and the skins of some of this lot, if I mistake not, are by this time full of hay and tow, with glass eyes in their heads.

The next lot was a hybrid (between a zebra and wild ass): this spiteful brute sold for eight pounds. He was formerly the property of Lord Derby, and when brought up from his lordship's sale, kicked the horse-box to pieces and did ten pounds' worth of damage, so that he

was dear at any price. A fine ostrich sold for twenty-seven pounds, and a nylghau for nine pounds, both fair prices.

Then came the lions and tigers. The first, a fine tigress, sold for seventy-nine guineas—not her value; the second, a very fine lion, for two hundred guineas. Just as the hammer was going down this noble brute stood upright in his den, and looking sternly at the crowd gave a roar of indignation—a fine study for an artist.

“Next we will proceed to the elephant,” exclaimed Mr. S. The folding doors opened, and gently led by his keeper, the elephant came forth. Sad and demure the poor beast looked, never again to draw his cart full of happy, smiling children round the gravel walks, receiving biscuit contributions from his young employers.

“Trot him out,” cried a bidder, as two hundred guineas were bid.

“By your leave,” cries the keeper. The crowd cleared away, and the elephant made a sort of a mock trot. His price went up in the market immediately, and he was finally knocked down to Mr. Batty, the circus proprietor, for three hundred and twenty guineas.*

* From one to eight elephants come over every year; the young ones are the most valuable, because they eat less, and

After the elephant came the camels, male and female; being stupid, they looked stupid. Nevertheless, the male was knocked down for sixty-two pounds, the female for fifty pounds, to Mr. Edmonds, for his menagerie. Lastly, came the giraffe. It was supposed to be too cold for him to come out, and his house was not big enough to hold the good folks present, so that while he was pacing his stall in solitude, the figures two hundred and fifty pounds were put down opposite his name on the catalogue outside. He was "bought in," I believe. This poor animal was soon afterwards taken to the docks, to be put on board ship, to be sent to the continent; while he was slung aloft in the tackle the ropes broke, and the unfortunate giraffe fell on the deck of the ship and fractured his spine. He fetched, however, the sum of twenty-five pounds as a dead beast.

Since the above was written, the Zoological Society has sustained a great loss by the death of two giraffes. On Tuesday, November 6, 1866, at about 7.0 p.m., two keepers, Smallpiece and Mundy, ran to the superintendent's office in the Gardens, crying out, "The giraffe house is on fire." My friend Dr. Murie, the anatomical prosector of the society, happened to be in the office; he immediately ran with the keepers to the giraffe house.

can be more easily trained. There is not now a large elephant in England. A good tusker is worth 1000*l.*, and fifty buyers for certain; a dead elephant is worth 20*l.* any day.

He found it filled with a volume of smoke, so dense that it was impossible to see anything. The two keepers having arrived a minute or two before Dr. Murie, had opened the windows, which he most judiciously ordered to be immediately closed to prevent the draught. They then proceeded to throw water on the burning straw, and going into the stable in the most plucky manner along with Scott, the keeper of the elands, trampled out the flames as well as they could.

As the smoke cleared off a little, they found two giraffes, mother and child, stretched on the ground motionless. They hauled them out as quickly as possible into the yard, but alas! found them pulseless and not breathing. They then re-entered the stable and quenched the fire. The other two giraffes would most probably have fallen victims to the fire, had not the doors of their stable been wisely thrown open and the animals turned into the yard immediately the fire was discovered. They were, when first discovered, breathing badly and stooping their heads, but otherwise they were not seriously affected. The larger one of the two caught a bad cold, of which it, alas! soon afterwards died.

The origin of the fire is a matter of mystery. It was confined to the eastward of the three compartments of the giraffe house. The straw, from some unknown cause, became lighted, and the flames must shortly have

spread over the floor of the stable. It is supposed that a match must, in some way, have got mixed with the litter, and that one of the animals, in walking about trod upon it, and set it on fire. The walls were blistered about six or eight feet high, and it is a mercy that the fire did not extend further.

By the kindness of Dr. Murie I was enabled to examine the two victims of this sad accident. It was very painful to see these two beautiful creatures but lately in the highest health and vigour, motionless, charred, and inanimate.

The measurements of the giraffes were as follows:—

	Large Animal.		Small Animal.	
	ft.	in.	ft.	in.
From nose to tip of tail	12		4	9½
From top of head to hoof	12	5	6	11
Length of mane	5	2	2	1
Head	2	2	1	3
Foot to shoulder	8		4	10½
Horn		6		3½
Ear		11		8
Tail, with hair	5	2	1	6

The poor animals were much scorched about the belly and legs, and the left hind-hoof of the smaller one was quite loose from the effects of the fire. The immediate cause of death was suffocation by the smoke combined with the shock from the intense heat of the burning straw.* The animals were heavily insured,

* PROTECTION OF STABLES FROM FIRE.—The accounts we hear, every now and then, of valuable horses being burnt to death in

but this would not replace the noble-looking mother giraffe and her pretty little young one.

This account of the unfortunate accident to the giraffes will, I feel convinced, be read with pain. It is not the money loss that we so much regret as the sufferings the poor animals must have undergone, racing about in their stable over the mass of burning straw till their agonies were ended by suffocation. Denied the wondrous galloping powers with which nature has endowed them, *and having no cry or voice that we know of*—for surely in their great peril they would, if ever, have then uttered it, may we not thence conclude that the giraffe is voiceless? The fire was purely accidental, and accidents must occur even under the best supervision of the most careful officers. I would suggest to the Council of the Zoological Society the propriety of looking to the efficacy of the fire-engine in the Gardens, and organising the keepers in such a way that for the future every man shall know his duty in

their stables, and especially the late accident by fire to the giraffes at the Zoological Gardens, induce me to suggest through your columns the use of sawdust for litter, a practice I have adopted for some time in my stable, on the score of economy and safety from fire; it simply requires the dung being raked off, and a little fresh sawdust thrown over any moisture. It does not require removing like straw daily, and forms a soft yet firm compost for the animal's tread, and if well managed is much cleaner than straw litter.—R. C. P.—Note from "Land and Water," No. 51, Jan. 12.

case of fire. The keepers should occasionally, as on board ship and in barracks, be exercised in "fire" drill, as was the case with the soldiers of the Second Life Guards. Again, saw-dust should be used in every case possible in preference to straw?

Giraffes for some years past have not been uncommon animals in our menageries, and as many as sixteen giraffes have been born in the Regent's Park Gardens, all from the stock originally imported more than a quarter of a century ago. A figure, with description of the first English-born giraffe, from the pen of Professor Owen, is published in the "Transactions of the Zoological Society." the first *living* giraffe brought to Europe was presented by the Pacha of Egypt to King George the Fourth, in 1827. Another specimen was, I believe, at the same time presented to the Jardin des Plantes. On a brick wall at Chiswick the words, "to the giraffes," inscribed in huge white letters, can still be seen, but I cannot recollect the exact date of the exhibition. The word "giraffe" is derived from the Arabic "zaraffa," signifying "eminently beautiful." Hence also, I learn, is derived the word "seraph."

On the 23rd of March 1867, the following leader appeared in Land and Water, No. 61, from the pen of our friend, Mr. Blyth:—

"After our recent serious ill-luck with the giraffes, the Zoological Society may now be congratulated upon

having had a young male born from the only one that remained of the four which so lately enriched their collection; that survivor being, accordingly, no longer the solitary occupant of the spacious tenement constructed for the accommodation of the tallest and one of the most remarkable of quadrupeds. The new arrival has come into the world in rather an inclement season for the country of its birth, when snow was falling within a few days of the vernal equinox, but there is nevertheless every prospect of its thriving. It is the seventeenth giraffe that has first seen the light in the Society's gardens; and of this great number almost every one has been reared to maturity. We need not feel particularly solicitous, therefore, about the prospect of this one living to take the place of its defunct sire; and we may accordingly congratulate the public, as well as the Zoological Society, upon so welcome an accession to the collection in the Regent's Park under existing circumstances; it being no easy matter to procure such an animal as a giraffe whenever wanted, however liberally the purchaser may be disposed to bid for one. At the same time it is exceedingly desirable that new blood should be introduced, as this has never yet been accomplished since the present stock was imported, rather more than a quarter of a century ago. We still hope that the Society will not let slip any opportunity that may yet offer to supply this undeniable desideratum in the opinion

of most physiologists and experienced practical breeders of animals."

The last lot at our Zoological auction consisted of the five bears—the first one, certainly as fine a specimen of a brown bear as we ever saw, sold for only six pound six shillings. The next, also a brown bear, nearly as big, for five pounds. The other two for four pounds and four pounds ten shillings. Poor things! They also were probably defunct soon after the sale; for they were all bought by an eminent hair-dresser in the City.

Not long since there was a certain barber, who lived in Hampton Street, Walworth Road, who did a good business in bear's-grease, and all this with *one* bear, which same bear he killed *three times a week*. He kept the bear in an area, where he could plainly be seen by the passers-by. He was a tame creature was this bear; the proprietor used to feed him with meat, placed on the end of a long stick, to make believe he was very savage; yet the little school-children, from the neighbouring "penny a week school," used to buy buns for him, and feed him with their fingers through the bars of the area, for the poor brute was half-starved. The children, sharp as children always are, were not taken in when the proprietor advertised, outside the shop, "another bear just arrived."

In order to carry out the trick, the barber simply

took the poor old bear, and by means of flour and grease made him into a "grey bear," or he blackened his coat and made him into a "black bear."

Yet the children always knew their old friend, who had but one eye, and that a regular "piercer;" nor could they fail to recognise his old moth-eaten coat, even when invited to come and see "the pretty new bear." who, strange to say, poked his mouth, "with the broken tooth in it," up to the bars of the area, as had been his wont for between five and six years. At the appointed day, when the bear was advertised to be killed, the poor beast was made to retire from the area; and shortly afterwards were heard, proceeding from under the barber's shop, the most dreadful yells and roarings, followed by groans as of the poor bear in the agonies of death. At last all was over, and the bear's cage was brought out (apparently empty) and taken off to the docks. A dried head and skin of a bear were duly hung up in the shop window, to show the public that a bear had just been killed for grease.

The next morning another bear was brought back from the docks, and deposited in the area, in his turn to be killed, and so on.

But the truth was at last discovered. There was a certain Jew fishmonger, who went by the name of "Leather-mouthed Jemmy," on account of his tremendously powerful voice. This man was hired on

bear-killing days to produce the roars and groans of the dying animal, which he did with a wonderful accuracy. On one unfortunate day the hairdresser would not give the accustomed fee of five shillings. Leather-mouthed Jemmy immediately told the whole conceit, and the hairdresser was obliged to shut up his shop, and sell his only bear, that he used to kill three times a week, for what he would fetch, to the rival barber over the way.

A HAPPY FAMILY.

TRUE and genuine felicity is a rare treasure among human beings, and few there are amongst us who really enjoy this blessing. Diverse are the dispositions of members of households, opposite their tastes, different their tempers. Rare indeed is a "Happy Family."

I never met with but *two* in my life. One was on Waterloo Bridge, some years ago; the other in a booth in Windsor onion fair. Oh, Happiness! Happiness! you are denied to men, but granted to a miscellaneous collection of birds of the air and beasts of the field. The origin of Happy Families is, I believe, this. It is recorded in the annals of the parish of Lambeth, that one Charles Garbett, a poor labouring man, had once upon a time a favourite cat; that this cat was robbed of her kittens, and that her maternal affection was so strong that she, in her desolation, took to her affectionate breast a litter of young rats, having either frightened away or else devoured the rightful parent of these poor orphans. She nourished these young rats; she reared them with affection and care till they arrived at rat-hood.

Here was a fact—a great fact. Charles Garbett was a philosopher in his way; his cat, like Whittington's, was the pioneer to fortune; he seized the idea—he exhibited his cat and rats. He thought, if a cat will make peace with a rat, a hawk will make peace with a pigeon. Then followed a series of experiments, long and tedious, resulting in what?—in a fact which we men and women can hardly attain to, viz., a “Happy Family.” The secret of conferring happiness upon families is now in the possession of the son of Charles Garbett; he received it as an heirloom, an hereditary fortune from his father, and for many years he reaped the results of his patient care and observation.

The reader will like to be introduced to this family. The fee of admission is one penny, with privilege to converse with either or all of them. In a large cage, many wires of which are broken (but not by turmoils in the family; oh, dear no!), we see the following.

Imprimis: The self-constituted commanding officer, Jock, the raven,—a fine handsome fellow, with such a glossy black coat, such an eye, such a sharp beak to keep due and proper order. Then we have four monkeys—two cats—four pigeons—three hawks—two ducks—four guinea-pigs—two ferrets—two rabbits—thirteen black and white rats—one cock—two hens—one badger—two kangaroo opossums—one hare—one racoon—(who has seen thirteen years' service, and who

has gone blind), and three dogs—Rose, Tom, and Limpy. These latter are chosen, not for their beauty, nor yet for their ugliness, but for their malformations. Tom has three legs in front (an extra one growing out of his chest), Rose has three legs behind and two in front, and Limpy has but one leg behind, with no trace of a second; she therefore “goes limpy,” as her name implies. The unfortunates have not been in any way mutilated or disfigured; they are all natural cripples, but very good-natured cripples withal, with free use of their tails. Quære, do the muscles with which a dog wags his tail so freely in welcoming visitors ever get tired?

It was supper-time when I made my call on “the family;” there were sundry slop-basins filled with capital bread and milk, placed in the cage; round one basin were sitting three monkeys, the two ferrets, and a guniea-pig, each and every one of them eating for their lives. The “*monkeys’ allowance*” in this case was decidedly the best, for the rascals took out first one handful and then another, and thus filled, not only their mouths and stomachs, but also the pocket-like pouches in their cheeks, which were full to distension. *They* lost no time—they were eating and stealing, stealing and eating, as long as there was any thing to eat or steal; the poor ferrets could only take single mouthfuls, and their sharp teeth did not seem at all good instru-

ments to pick up soft bread and milk ; they reminded me of an Englishman eating rice with Chinese chopsticks. The guinea-pig was not big enough to reach well over the basin, and therefore every now and then tipped it over for his own special benefit. In the rear of this supper-party was the duck, who every now and then, reaching over the whole party, thrust her long neck forward and gobbled up a good bill-full, in the very face of the supper-party.

One of the monkeys had a private meal served all to himself; he had been doing duty all the evening outside the show, in company with the racoon. These were the decoy animals, placed as sentries on each side of the door, to attract the attention of visitors and cause an influx to the exchequer. This monkey was the show monkey, the best-looking of the lot, but apparently spiteful. On offering to shake hands, he showed his teeth and began a long chattering conversation, with sundry demonstrations of animosity. His master, however, assured me that "he was the biggest bounce in England, and would not harm a fly."

There was lately in "the family" just such another monkey who could not be prevailed upon to take any food when offered. It was soon observed that this creature's great characteristic was thieving; "kleptomania" (as the love of thieving is now called) was strongly implanted in his mind. So great a thief was

the beast that he would not eat anything *unless he stole it*. His master therefore pretended to hide his dinner from him, and, when nobody was looking, Master Monkey would come and steal it, and enjoy it, which he would not condescend to do when placed before him in a proper monkey-like manner.

Thieving propensities, whether in man or beast, always, sooner or later, bring the owner of those propensities to grief. One day the master was painting the van with red paint, which he placed for security's sake in concealment. The "kleptomaniac" monkey was watching all the time, and when the coast was clear made a meal of the red paint, which gave him such a fit of indigestion that he became a dead monkey—a warning to all thieves, whether biped, quadruped, or quadrumanous. The monkey members of "the family" require great care at the fall of the year, they suffer so much from cold.* I saw one of them retire after supper from the bread-and-milk basin, with a ferret, which he nursed in his arms,

* The Barbary ape (so called) is, however, an exception. A very large specimen was given me in 1849. In May, 1851, I gave 'Jenny' to my friend J. Bush, Esq. of Clapham; she is still (1867) alive and well. She sits nearly all day on the top of a wall, and has only a common dog-kennel for shelter. She is out in frost, snow and, rain, and is none the worse for it. Her fur is magnificent, and she has a beard, that makes her face positively beautiful—for a monkey; for, correctly speaking, she is a tailless monkey, as distinguished from a true ape.

and the two coiled themselves together as snug as could be. The master always "takes the monkeys out of the cage on cold nights, and puts them in a box together, where they warms one another which is as good as anything." The monkeys also suffer much from bad tails; the tip becomes dead and mortified, and the result of Mr. Garbett's experience is that it is no use trying half-measures, and that an operation is the only remedy for the disease. He therefore puts the monkey, in spite of his remonstrances, into a bag, leaving the tail protruding. With a sharp knife he then separates the skin up as high as the joint of the diseased portion, and cuts it off. The bleeding he stops with a hot iron. He then brings the skin over the wound, and applies powdered resin, and a top-dressing of bitter-aloes in order that the monkey shall not lick the wound. "After the operation, by adopting this plan," said the father of this "happy family," "I never has no difficulties with my monkeys' tails, though I has sometimes with their manners."

Kleptomania, or the love of stealing, is a passion so firmly inherent in the monkey family, that it would seem that no monkey can enjoy anything unless it has been attained by furtive means.

I lately had a little monkey, who was such a great thief, that if he had been a human being he would have been transported over and over again for numerous acts of petty larceny. I, however, turned his thieving

propensities to good account. Master Jack (and I had him some time) showed evident symptoms of phthisis, or consumption, and I prescribed cod liver oil. It was placed openly before him, on the dining-room table, but he refused it with symptoms of disgust and sundry tail-shakings. I then poured a little into a saucer, and placed it in such a position that he should find it for himself, while I pretended to be reading and not to notice what was going on. The trap took; Jack, thinking that he was *stealing* the oil, sucked up the prescribed dose, making a face, not implying nausea, but rather high glee at his own cleverness.

This "deceit," however, was after a time discovered by the artful creature, and one day I found my friend with his long tail and arms tightly coiled round the table lamp, and stealing the colza oil as it dropped down from the wick. He managed to get one of his long spider-leg-like fingers through the brass work of the lamp, and held it till a drop of oil fell on it; he then put it in his mouth and sucked off the oil like a child sucking sugar-candy. How he could manage to gaze at the intense light, which one would have thought would have hurt his eyes when so near the lighted wick, I know not. I fancy however that the light bothered him somewhat, for he used to frown dreadfully while he was waiting for the oil to drop on his finger. (See engraving.) I placed colza oil before him; no, he would not touch it; but nevertheless he had no ob-



HOW JACK TOOK HIS MEDICINE.

jection to it when he stole it for himself from the lamp. He was certainly better and fatter for his medicine, which was so sweet because stolen, and I really think it saved his life. The engraving by Mr. Carpendale represents Jack taking his medicine.

Jack, too, had a marvellous propensity for picking things to pieces, and smashing articles that came in his way; strange to say, he never tore a useless bit of paper, or broke a common or valueless bit of goods. One day he sneaked out of his cage, and had a good morning's work to himself, tearing off the leather and pulling out the lining of an old armchair. He was, after an hour or two, discovered in the act, and taken into custody to be duly chastised for his mischief. He cried "murder" when he saw preparations made to punish him, but at the same time he held out his hand, firmly closed upon something in it. His pickers and stealers were unclasped, and in the palm of his hand was discovered a half-sovereign, which he had most certainly found and picked out of the chair (an old second-hand one), and which probably had been buried in its lining for years. His proffered ransom got him off his punishment, but his investigations into the structure of watches, books, ink and cruet stands, writing-desks, MS. notes, &c., did not afterwards produce equally valuable discoveries.

Nothing pleased Jack so much as to make his escape,

Jack Sheppard fashion, from the wire cage in which he was kept by the kitchen fire. He would pick and pick, with his long skeleton-like fingers, till he found the staple loose. If anybody happened to look round at him while he was at work, he would drop instantly on the hay and pretend to be asleep. When he managed to get the door unfastened, he would not bolt out in a moment, but push it open as gently and gradually as a burglar. He would then sneak out, and the cunning rascal would carry his chain in a curl of his tail to prevent it rattling on the stones and the servants detecting his pranks. His object was to get to my room, and on looking up I frequently found my friend nestled inside the fender. He came into the room so quietly, that I did not know he had escaped from his cage till he called my attention by a friendly chatter, as much as to say—"I've got loose so cleverly, you really must not scold me for it."

When winter came on I always had a coat made for him, which was sewed on at the back like a lady's stays, or he would not rest till he had unpicked the stitches and got it off. As it was sewed at the back he could not get at the stitches. Jack's tailor was the regimental tailor of the Second Life Guards. When the tailor made him his first coat he made him the coat of a 'Troop Corporal-Major,' putting the crown and four stripes on the right arm. Jack soon set to work and

pulled off the crown, and then one by one the stripes. The coat was sent back to the tailor for repairs, and when it was returned we found that Jack had lost rank, for he had now only three stripes on his arm and was therefore a "Full Corporal." These he destroyed, and he was then reduced to two stripes, and made only a "Lance-Corporal." The punishment however did not take much effect on Jack, for he at once deliberately set to work to "destroy his kit, contrary to the Mutiny Act." All hopes of his reformation were then given over, and Jack was reduced with disgrace to "Full Private," with no stripes at all, and he remained Full Private the rest of his days.

Jack was a little South American Capuchin, so called because the markings on the head are not unlike a monk's cowl. I bought him of Jamrach, who called him a "Musk Monkey." Even though he did not smell of musk, there was seldom any unpleasant odour about him. Should any of my friends wish to have a pet monkey, let me advise them to get a South American monkey of the same particular genus (*Cebus*), and never an Old World monkey; these American monkeys are thrice as intelligent as their non-prehensile-tailed relatives; but I know not the reason of this.*

* Mr. Blyth tells me that he long possessed a great favourite of this kind when in India, to which country it had been brought *via* Jamaica. It used commonly to roam loose about

The activity of my monkey was something extraordinary. He knew well enough when the orders were given to take him to bed, and move him from his comfortable corner under the fender, for he was a lazy rascal and did not like going to bed early or getting up before eleven o'clock in the morning. When bedtime arrived, if not immediately secured before he was aware of his coming fate, he would cry like a naughty child; he was off like a bird, and catch him if you could; no art, no inducements, no devices, ever so cunningly used, would induce him to come within arm's length, and it was sometimes half an hour's work to get him at all.

If it be so difficult to catch a monkey in a room, how much more difficult (I thought to myself) must it be to catch the wild monkeys out of the lofty trees in their native forests, for exportation. I therefore put the following query in the "Field: "

"I should feel most obliged if any of the correspondents who live in monkey countries would kindly tell us how the monkeys that are brought to England, France, Germany, &c., are caught. Are they taken when quite babies, or are traps set for them; and, if so, of what kind? It has always been a puzzle to me to know how the natives can possibly get hold of them, except as

his garden, and never left the premises, which, however, were tolerably extensive. He (or rather she) was exceedingly fond of being nursed, *i.e.* taken in the lap, when she would commonly purr like a cat, though less audibly.

quite little things; and even they must have been difficult of capture in the open forest, and troublesome to rear afterwards. I should much like to see a trap that would catch a monkey alive and uninjured. Monkeys are the most knowing and suspicious of the whole animal creation; and I doubt even whether 'High Elms,'* with all his science and knowledge of trapping, would catch a monkey without injuring him and spoiling his sale."

The following answers were kindly sent to me, first, by Mr. John Mauley, who writes:—

"In answer to the inquiry by Mr. Buckland, I may say that the country people in the province of Pernambuco, Brazil, catch both monkeys and parrots by exposing for their use a spirituous preparation of cahaça (cane rum) and the fruit of the cajá, a species of spondias or hog-plum, for which the animals have a partiality; this partiality I have verified with animals in captivity.—JOHN MAULEY."

Secondly, by Mr. J. W. Slade, who says:—

"I can corroborate your correspondent John Mauley's answer to Mr. Buckland, by the following extract from Parkyn's 'Life in Abyssinia':—'These monkeys are caught in various ways. One plan adopted by the Arabs of Taka has struck me as most simple, and at the same time as likely to succeed as any other; jars

* Author of a most excellent book on the art of trapping.

of the common country beer, sweetened with dates and drugged with the juice of the *oscher* (*Asclepias arborea*), are left near the places where they come to drink. The monkeys, pleased with the sweetness of the beverage, drink largely of it, and, soon falling asleep, are taken up senseless by the Arabs, who have been watching at a distance. Monkeys certainly will get as drunk as men if they have the chance.—J. W. SLADE.”

Another way of catching live monkeys I read in the “Technologist,” Feb. 1862, No. XIX: “The Sapucaya nuts are found in Brazil, and are also called by the name of ‘Pot-plants,’ or ‘Monkey nuts.’ They open by a sort of lid, which falls off, leaving a large opening sufficient for the nuts to fall out. So eager are the monkeys to obtain the nuts, that they will thrust their hand into this opening, which they do with difficulty, and grasp the nuts; but the orifice which admitted the empty hand will not allow the egress of a full one, and the animal will torment itself a long time rather than relinquish its hold. The Indians avail themselves of this cupidity to entrap the monkeys. They open the lids of several capsules, and then throw them under the trees; the greedy monkey will not be satisfied with one pot, but will thrust its hands into two, and will not relinquish its hold; the encumbrance renders its capture easy, and has led to a saying amongst the Brazilians, equivalent to our ‘Old birds are not caught with chaff;’

it is, 'He is too old a monkey to be caught by a cabomba,'—the capsule being called by them a cabomba.*

In that admirable work, "The Naturalist on the Amazons," by my friend Mr. Bates, I was pleased to read another way of catching monkeys in the forest. Mr. Bates writes: "The white uakari (*Brachyurus calvus*) are obtained by shooting them with the blow-pipe and arrows tipped with diluted ūrari poison. They run a considerable distance after being pierced, and it requires an experienced hunter to track them. He is considered the most expert who can keep pace with a wounded one, and catch it in his arms when it falls exhausted. A pinch of salt, the stated antidote to the poison,† is then put in its mouth, and the creature recovers."

I once bought a wretched, forlorn-looking African creature for the sum of 4s. This was real charity to the poor beast, for his "dog-dealing" master, disgusted with him "because he cost him 6d. a day to grub him," had just concluded arrangements for a "monkey hunt," which of course did not come off, as the monkey was not forthcoming.

* I have often tried a similar plan with my tame monkeys, but it would not act at all.

† The Asiatic monkeys are always captured very young, as I am informed by Mr. Blyth. Great numbers of small juvenile *Hunumán's* (*Semnopithecus entellus*) and *bhunders* (*Inuus Rhesus*) are brought in crowded cages to Calcutta. These two are the only species of monkey that inhabit Bengal; but many others are commonly brought to Calcutta from the Malay countries and elsewhere.

On bringing him home, I found that about an inch of his tail was as hard and dry as the end of a fagot stick. I therefore took out my penknife, and, as I had been taught to do by the owner of the "Happy Family," gradually pared it away. I expected every moment Master Monkey would have resisted and shown fight; but no, as long as I gave him no pain he made no resistance whatever, but sat down on the table as quietly as possible, while he looked on as though I was operating on the tail of some other monkey, and laughed and grunted at the fun. At last I pared his tail down close to the living skin and bone, and hurt him a bit. Reader, if you have had a corn cut, and been hurt in the operation, you can appreciate the tremendous expostulations and grimaces, on the part of the monkey, which he poured forth with all his might the moment I came down to the "quick of his tail." The operation was, however, quite successful, and the monkey, after his tail was diminished in size, immediately began to improve in health and in personal appearance. It is a curious fact that monkeys with prehensile tails never gnaw or bite them; they seem to know too well that this "third hand" is too valuable to be used for food, even by themselves.

The owner of the "Happy Family," told me that the greatest difficulty experienced in making "his family continue in a state of happiness," is to supply a vacancy caused by death or accident among its members; for, like boys at school, the aborigines surround and tease

the fresh comer.* When it is found desirable to fill up a vacancy in this miscellaneous collection of birds and beasts, the new arrival is placed in a portion of the cage divided and separated from the rest, where free liberty of speech is allowed, but yet "paws off" is the order of the day; in this manner reconciliations soon take place. There is one animal, however, which, above all others, is difficult to tame—it is the hedgehog.† There is more trouble required with this creature than with any other, for he is of a morose disposition, and timid withal; and it is a long time before he will fraternise with his fellow prisoners, for he coils himself up in a lump, sets his bristles in formidable array, and "the more you stir him up the more he won't uncoil." Hares, too, are difficult to tame; and it is a curious fact, that I have learned from several quarters, besides from the poet Cowper, that hares differ much in mental ability, some being very stupid, others very clever. In judging of the performing abilities of a young hare that is about to commence a course of instruction on the drum or tambourine, notice should be taken of the diameter of the forehead, for experience

* It is the same in the monkey-house in the Zoological Gardens, whenever a new inmate is introduced.

† I do not quite agree with this statement of the showman, that hedgehogs are difficult to tame, for I have had many of them; still, however, they will, *unless very tame indeed*, coil up at the slightest alarm. See my "Curiosities of Natural History," Second Series.

has laid it down as a law that, with hares as with men, the more brains they have in their skulls the better learners they become. This is particularly the case with horses: reader, please observe for yourself.

It has often been a subject of regret to my mind, when reading the accounts of sportsmen and naturalists of their doings in the pursuit of wild animals (whether in the desert or in the forest), that more attention is not paid to the observation of the habits of the animals, and that their "social customs" are not more attended to; for, depend upon it, all animals, whether wild or tame, have their customs and habits as much as we have, and of these we know little or nothing. Most animals quickly ascertain the presence of man; in an instant they are on their guard, waiting for their enemy. What can the sportsman then tell of their habits? Let him at this moment (unless pressed by hunger) put down his rifle and take up his telescope, and he will most assuredly learn something he did not know before, and will probably ascertain some fact in natural history hitherto unknown to science.

In reading the accounts of the pursuit of the mighty elephant in the jungle of India, of the watching for the beasts of the forest drinking at midnight at the lone desert fountain in Central Africa, of the fierce gorilla in the dense forests of the tropics, or of wild ducks and swans on some lonely lake or swamp, I often come on

the most exciting description of the discovery of these creatures, feeding quietly and undisturbed in their native homes. What a chance, what an opportunity of learning their habits, and their loves, and their wars! But—No; man thirsts for their blood. A few lines further down in the page of the book we read the old story—I mentally hear the ring of the rifle or gun—and in an instant a beautiful scene of Nature is ruthlessly dissipated. The frightened creatures fly hither and thither; what was but just now all happiness and quiet, resolves itself into bloodshed, turmoil, and misery.

There are thousands of "Happy Families" of Nature's own making, enjoying life and health in solitary and sequestered spots all over the face of the earth. I grant that man has a right and just power given him to destroy, either for food or raiment, all creatures below him in creation, but he should not wantonly abuse this power—let him temper it with mercy. The possession of the hunted beast or bird is never equivalent to the pleasure of its pursuit. Life is easily taken away, but can never be restored. Every living thing, after its kind, enjoys life and happiness: let it be the privilege of those who have the much-to-be-envied opportunities of observing Nature's handiwork in the forest, the desert, or the field, to open their eyes and drink in knowledge at a small price.*

* My friend Captain Hardy R.A., of Halifax, Nova Scotia has given us the following beautiful picture of a primeval forest

Let a knowledge of the habits of an animal or bird be of far greater value to the sportsman-naturalist than the possession of its bleeding carcase, from which all that we can learn of its habits must be by examination of its structure. Many a volume might be written upon the habits of animals; but it never can or will be written

at night:—"I have always noticed that in the small hours of the morning there appears to be a general cessation of movement of every living creature in the woods. Often as I have strolled from camp into the moonlight at this time I never could detect the slightest sound—even the busy owls seemed to have retired. The approach of dawn, however, seems to call forth fresh exertions of the nocturnal animals in quest of food, and all the cries and calls are renewed, continuing till the first signs of Aurora send the owls flitting back into the thick tops of the spruces, and calling forth the busy squirrels and small birds to their daily occupation.

"Although almost all of our mammalia are nocturnal in their habits, and many of them beasts of prey, their nightly wanderings and strife with their victims are conducted in the most orderly manner compared with the scenes we have referred to. Quiet, noiseless stealth is the characteristic feature of all animal life in the forest; mutual distrust of the same species and ever-present tendency to alarm predominate even in the wildest districts, where the sight of man is unknown, or unremembered at least. At the slightest sound the ruminants and rodents cease feeding—remaining motionless either from fear or instinct; the rabbit or hare thus frequently avoiding detection; whilst the moose can so silently withdraw if suspecting an enemy, that I have on more than one occasion remained hours together on the stillest night, believing the animal to be standing within a few yards in a neighbouring thicket, to which he had advanced in answer to the call, and found at length he had suspiciously retreated. The great creature had retired, worming his huge bulk and enormous antlers through the entangled swamp, without detection by the straining ear, to which the nibbling of a porcupine at the bark of a tree in the same grove was plainly audible."

unless the advantage of observing living creatures be impressed upon sportsmen, who will have to carry home a lighter bag, but yet more than its equivalent in the knowledge of new and valuable facts.

Nature has ordained that *all* her families should be happy. A poor man in Windsor fair demonstrated to us, practically, the pleasure of looking at and observing animals and birds undisturbed, and without the fear of men among them. Let those who have the opportunities learn from him, and let them stay the *wanton* hand of destruction.*

If travellers and sportsmen will only do this, they will add to their own—and at the same time not deprive other creatures of that most valuable of all possessions—HAPPINESS.

* Now that the "King of the North" has visited us in his chariot of snow and ice, we shall begin to hear of the arrivals of many emigrant birds, inhabitants both of "Land and Water." Some of these have shown themselves even *before* this weather was upon us. That beautiful bird, the waxwing, has arrived in considerable numbers; and how has English hospitality received him? The 'Naturalists' Court Circular' reports the following receptions: "Four beautiful specimens were shot!" "I have had the bird stuffed." "A good number of this flock were killed." "It is hoped that others will be taken." "It is probable that more will be shot," &c., &c.

It is most interesting to observe how we may gain indications of coming weather from the animal creation.

"The Indian hunters asserted,

Cold would the winter be, for thick was the fur of the foxes."

—Leader by F. Buckland in "Land and Water."—See also Mr. Blyth's remarks on the wanton "Destruction of Sea Birds" in Appendix and "Wild Elephant at Home."

PETHERICK'S HIPPOPOTAMUS.

WHEN my friend, Mr. Petherick, the well-known explorer in Central Africa, arrived in London, some three or four years ago, from Khartoum, Sudan, Upper Egypt, he brought with him a young hippopotamus. In one of his expeditions he came (he told me) to a lake full of vast beds of reeds, between which there flowed little streams of water. When sailing slowly along, the man at the masthead (who was looking out for open passages among the vegetation) descried a small dark-coloured mass upon a bed of reeds. This object they made out to be a baby-hippopotamus, left by itself by its mother, who doubtless, when she quitted her home, thought her young one was safe enough. The men jumped into the water, and catching the little rascal in their arms, brought him into the boat. During this operation he cried and squealed lustily, after the manner of our familiar porcine friends at home. He was a baby, and not a fine baby at all for a hippopotamus, for he was not much larger than a terrier dog, and probably not more than about two days old. The mother-hippopotamus luckily did not hear the

screams of her infant, or there would have been a fight between biped and quadruped for the possession of the "squaker."

Young Hippo was consigned to the care of one of Mr. Petherick's Arab hunters, Salama by name, who brought it up with the greatest care, and, I may say, affection. Mr. Petherick brought down the Nile with him no less than four live hippopotami: this one I am writing about alone survived out of the number. Two of these animals were lost in consequence of the boat in which they were striking on a rock in the cataracts and sinking. One of the animals was hampered in the boat, and was drowned; the other swam to shore, and of course escaped; the third died a natural death.

When the first hippopotamus, in the year 1850, was sent over from Egypt, he was provided with all sorts of creature comforts; an army of cows and goats accompanied him, to afford him milk; he had a huge portable bath to bathe in, and, in fact, travelled *en prince*.

His less fortunate relation arrived in much more humble style. When the dray arrived at the Zoological Gardens from the railway station, we were all of course very anxious to see the new arrival. The tarpauling being taken off, there was discovered a huge box, made of strong deal boards, like a diminutive railway horse-box, and in this Hippo had travelled

all the way (with an occasional bucket of water thrown over him) from Alexandria, thereby proving an important fact, that he can dispense with the bath without other prejudice than a rough skin. How to get him into his sleeping-apartment was the question. Salama assured his master that Hippo would follow him anywhere. One side of the box, therefore, was taken off, and out the poor frightened beast walked. Salama gave him his hand to smell, and he trotted after his kind protector with a long, steady, calf-like trot, swinging from side to side, while he kept his head close to his master, staring about him like a frightened deer.

He was about the size of a very large bacon hog, only higher on the legs. From not having been able to have a bath for six weeks or more, his skin had assumed a curious appearance; the back, instead of being soft, slimy, and indian-rubber-like, was quite hard and dry, and the skin was peeling off from it as from the bark of a tree; it was, in fact, much more like a bit of an old forest oak than of a water-loving animal. It was of course expected that the moment Hippo smelt and saw the water he would rush into it; but no—he merely went up to it and smelt it with a look of curiosity, as though he had never seen water before; and it was not till the Arab himself advanced partially into the water that Hippo would

follow. He soon came out again, and was only persuaded to go right into the deep part of the water by the Arab walking round the edge of the tank. Hippo then began to find out where he was, and how comfortable the warm clean water was. Down he went to the bottom, like a bit of lead; then up he came with a tremendous rush and a vehement snorting; then a duck under, then up again, prancing and splashing in the water after the manner of Neptune's sea-horses that are harnessed to his chariot in the old pictures of the worthy marine deity. I never recollect to have seen any creature, either man or beast, so supremely happy for a short time as was poor travel-worn Hippo in his bath after his long voyage of so many thousand miles.

Coming out of the water, Hippo smelt about for food; mangold-wurzel was given him, and mightily did he enjoy it.

Like all young animals in a strange place, he kept a close eye upon his keeper, and gave a peculiar half-bellow, half-cry, when he went out of his sight, refusing food until his return. Evening soon arrived. Hippo retired to rest by the side of his faithful nurse, who reported the next morning, that, whereas, on ordinary occasions, if he coughed or moved, or made the least noise in the night, Jamooss (the Arabic for hippopotamus) would wake up and answer, the night of his arrival he slept a sound sleep, waking only at sunrise

for his breakfast and his bath, which he again mightily enjoyed. His skin soon began to lose its bark-like appearance, and to get soft, slimy, and of a black, pinkish colour.*

Though tame enough to his keeper, Buchet (for that was the familiar name his keeper gave him) had a temper of his own, which he would occasionally show to strangers.

As regards the danger from the hippopotami when at home, Mr. Petherick told me that they are not to be feared when the traveller is in a large boat, but that they will follow with intent malicious the smaller rowing boat. They will make their attack in two ways, either by rushing in a succession of springs or bounds, every one of which brings one-half of the body out of the water, and, when alongside, rise open-mouthed and endeavour to carry off some one on board; or by driving full speed under, and using their immense head as a battering-ram, strike the boat with such force as to make her quiver from stem to stern. Mr. Petherick has known planks knocked clean out of the side of a boat, sinking her almost instantaneously and before the shore could be reached by her astonished crew.

* This hippopotamus is now in America. He was sold, I believe, to Barnum for a large sum of money. I should be curious to know under what name this king of showmen advertised him to the public.

On one occasion Petherick lost a man out of the boat, the hippopotamus rising out of the water, and seizing him in his fearful mouth. The body was cut in two by the animal's teeth. The hippopotamus cannot bear to be cut off from the water. One of my friends was once tracking a beast that had gone inland. The brute heard him and, turning round sharply, charged him; then, catching him before he could get out of the way, tossed him high up in the air, without, however, doing him more bodily harm than frightening him out of his wits. Nothing could afterwards induce this hunter ever to follow hippopotami on shore. These huge beasts make a fearful bellowing and crying noise at night, often to the traveller's great discomfort.

My late friend, Dr. Genzick, of Vienna, told me that he once shot a hippopotamus. He got a fair and steady aim at him, the beast probably imagining the man in the boat did not see him, as he had sunk himself deeply into the water, leaving his nose and eyes only exposed. The ball struck the hippopotamus full on the head, and he sank instantly to the bottom, where he kicked up such a turmoil that, as Genzick said, "one would have thought there was a steam-engine gone mad at the bottom of the river." However, the Doctor never found the hippopotamus, though he hunted everywhere for him, but the next year he discovered his whitened

bones upon a sand-bank some distance from the place where he had shot him. He knew it was the beast he had shot the year before, for he recognised the bullet he found in his skull as his own make.

During a visit to Paris, some six years back, I heard that a young hippopotamus had just been born at the *Jardin des Plantes*. I went up to see it, but it was dead. It appears that the poor little thing was born in the water, and paddled round and round the sides trying to get out; the mother endeavoured to help it up with her head, but she somehow managed to injure or else drown it. I believe, in the spring of 1865, another young hippopotamus was born at the *Jardin des Plantes*, and was taken from the mother immediately at birth. Dr. Sc Slater exhibited drawings of it at the meeting of the British Association at Birmingham. He reported that it was alive and well.

Everyone is well acquainted with our old friend, the hippopotamus at the Zoological; but everyone may not know that he once had a tooth drawn, and that by a non-professional dentist, and with a pair of forceps made expressly for the purpose. Mr. Bartlett was the operator, and I think, after the reader has read his communication, he will agree with me that he deserves great credit for his ingenuity and the surgical skill he displayed with his huge patient. Mr. Bartlett writes to me as follows:—

"MY DEAR MR. BUCKLAND,

"You will be glad to know that I have succeeded in performing perhaps the largest, if not the greatest, dental operation on record.

"Our male hippopotamus has been, as you know, suffering from a fractured tooth, and fearing that the consequences might be serious, I had a strong oak fence fixed between his pond and the iron railings, and I then determined to remove the broken tooth; this I accomplished on the morning of Wednesday last, but not without a fearful struggle.

"I had prepared a powerful pair of forceps, more than two feet long; with these I grasped his fractured incisor, thinking, with a firm and determined twist, to gain possession of that fine piece of ivory. This, however, was not quite so easily done, for the brute, amazed at my impudence, rushing back, tearing the instrument from my hands, and, looking as wild as a hippopotamus can look, charged at me just as I had recovered my forceps.

"I made another attempt, and this time held on long enough to cause the loose tooth to shift its position, but was again obliged to relinquish my hold. I had, however, no occasion to say, 'Open your mouth,' for this he did to the fullest extent; therefore I had no difficulty in again seizing the coveted morsel, and this time drew it forth, with a good sharp pull and a twist.

out from his monstrous jaws. One of the most remarkable things appeared to me to be the enormous force of the air when blown from the dilated nostrils of this great beast while enraged. It came against me with a force that quite surprised me.—A. D. BARTLETT.”

A little-known species of hippopotamus, of comparatively pigmy dimensions, has been discovered in Liberia, the Western African settlement of emancipated negroes. It is so common a hundred miles in the interior of that country as to supply much of the animal food eaten by the inhabitants. This small *Hippopotamus liberiensis* would be an interesting animal to add to the collection in the Regent's Park.

Chunie, the elephant that was so barbarously “murdered” in Exeter Change,* because he was “mad,” was a terrible contrast to the above case. This poor elephant was mad, but he was *mad with the toothache*.† If there had been “a Bartlett” in charge of him, Chunie would never, I feel convinced, have been shot; for he would have found some means or other, probably by making an incision down to the root of the diseased tusk, of relieving the intense pain that the poor brute must have suffered.

MR. CROSS, the proprietor, writes in his “Companion to

* See “Fossil Elephant in England.” Appendix.

† See the tusk itself in the Museum of the Royal College of Surgeons.

the Royal Menagerie at Exeter Change, 1820," the following account of his elephant Chunie:—

"There is no record of any animal having been seen in Europe of the volume of body equal to the elephant now forming so distinguished a portion of this collection. His growth since 1810, when he was exhibited on the stage at Covent Garden Theatre, has been prodigious, he being now more than double the size he was at that period. His height is above ten feet, and his weight above five tons.

"The food which constitutes his daily consumption amounts to the weight of more than eight hundred pounds. Familiarly speaking, he may be called an *animated mountain*. His habits are of the most amiable description, and he shows off his qualifications with perfect good-humour," &c.

Very true, Mr. Cross, but soon afterwards the poor elephant "went mad," and his execution will be an everlasting disgrace to those who had anything to do with the matter. A long account of the slaughter is to be found in Hone's "Every-day Book." I gave an abstract of this in "The Field," in answer to a question from a correspondent. I am glad I did so, for I am able now to give a much more authentic account from an eye-witness, who kindly wrote to me on the subject:—

"May, 1857.

"I observe that you have favoured the readers of the 'Field' of May 9 with an account of the slaughter of poor Chunie, the elephant, at Exeter Change. You say it is from Hone's 'Every-day Book,' but I think Hone does not give it quite correctly.

"As one of the perpetrators of that cruel deed, if you choose I will tell you what I saw done that day.

"I was at the gunmaker's, Stevens of Holborn, when Mr. Herring of the New-road came in to borrow rifles and beg Mr. Stevens to return with him to the 'Change to shoot the elephant. Mr. Stevens was a man in years and full of gout, and I knew directly what would happen; he pointed to me as one for his substitute, and in a very few minutes I had selected the rifles, cast balls, &c., and we were on the way to the Exeter 'Change. We arrived there and found the greatest confusion; beasts and birds most uproarious, set on by witnessing the struggle to keep in order the ungovernable elephant. The teething season was supposed to be on, but your description of the state of the tusks appears to settle that question. Mr. Cross was much vexed with his coming loss, and Mrs. Cross in tears.

"I was supposed in that day a steady rifle shot, and with Mr. Herring, in my conceit and ignorance, intended to kill the poor brute with our first fire. Dr. Brooks



had tried the poisons, and by his directions we fired into a crease rather below the blade-bone. I expected to see him fall; instead of which he made a sharp hissing noise, and struck heavily at us with his trunk and tried to make after us, and would but for the formidable double-edged spear-blades of the keepers. These spears were ten feet long at least, wielded from a spiked end below, and the trunk wounded itself in endeavours to seize the double-edged blades. It was most fortunate the poor beast stood our fires so long afterwards, for, had he fallen suddenly, and struggled in death, his struggles would have brought him from out of his cage or den, and if he had fallen from the strong flooring built under for the support of his great weight, my belief is, through the whole flooring we should have all gone together, lions and men, tigers and birds. He struggled much to come after us, and we were compelled to reload in the passage, and after firing about six shots more the soldiers came from Somerset House; they had but three cartridges each man, and I forget now how they were allowed to come off duty. He bore the presence of the soldiers much better than ours, and I for a time was compelled to load the muskets for the men; they had not the least notion of a flask: they ran the powder into the musket-barrels in most uncertain quantities, and I was compelled to unload and reload for them, or we should have had some much worse accident. The



FAC-SIMILE OF DRAWING OF EXECUTION OF CHUNIE THE ELEPHANT.

murderous assault was at length closing, and I entered with a loaded gun, taking the last shot as the noble brute seated himself on his haunches; he then folded his forelegs under him, adjusted his trunk, and ceased to live, the only peaceful one among us cruel wretches; and the only excuse I can now find for the cruel slaughter is that it was commenced and must be finished. Poor brute! it was a necessary though cruel act; he was ungovernable in a frail tenement."

By the kindness of Mrs. Edward Ellis I am now enabled to give a copy of an original water-colour drawing of the execution of this poor elephant. The drawing was made by a gentleman who was present, and I have had the original copied exactly by Mr. Briscoe the artist.

THE WILD DUCKS' POND.

Romæ Tibur æmem ventosus, Tibure Romam.*

THUS wrote that most wonderful of men, Horace. He was, like many eminent literary men of the modern period, a Cockney—a Roman Cockney; he was fond of pleasant, learned, and witty society, of good dinners, and of the Falernian—of the comet year, of course. Yet human nature is always human nature, and the fresh air and change of the country is always grateful to the brain-worker, whether he lived a thousand years ago in Rome or this very week in London. Even Horace, like some of ourselves sometimes, became hipped, out of sorts, and miserably melancholy. He tells us so as plainly as words can speak :—

To Celus, muse, my warmest wishes bear ;
And if he kindly ask you how I fare,
Say, though I threaten many a fair design,
Nor happiness, nor wisdom yet are mine—

* Inconstant as the wind, I various rove ;
At Tibur, Rome ; at Rome, I Tibur love.
Reading I hate, and with unwilling ear
The voice of Comfort or of Health I hear :

Friends and physicians I with pain endure,
 Who strive this languor of my soul to cure.
 Whate'er may hurt me, I with joy pursue;
 Whate'er may do me good, with horror view:
 Inconstant as the wind, I various rove;
 At Tibur, Rome; at Rome, I Tibur love.

. I. viii.

Having doubtless posted the above epistle to his friend, of course an invitation came as follows:—

DEAR HORACE,

Why don't you come here at once from Saturday to Monday? Shall be glad to see you, and will send the "quadriga" to meet you. Did you see what Sallust says in the papers this morning? "The poor Britons—there is some good in them after all—they produce an oyster." I have just got a barrel given me. Come and try some of the products of this barbaric island; also a turbot finer than that which you mention in your Satires. Come at once.

Yours ever,

CELSUS ALBINOVANUS.

Horace could not go to his friend's house by railway, for the same reason that Guy Fawkes (in the song) could not obtain certain articles he wanted for his firework display—namely, "because they weren't inwented, with a tow, row, row," &c. We, however, of the present day are much more lucky, and we fly with the speed of an arrow to the domains of our country friends and back again in almost less than no time. Folks talk about hot and cold water baths, vapour baths, hot-air baths, Turkish baths, and other kinds of baths innumerable.

but of all health-giving, invigorating baths, give me the good, pure, *fresh-air* bath, and this is how to take it:—Get an order from the authorities, and ride on an engine of the Great-Western express to Didcot and back, when it is blowing half a gale of wind, varied by a shower or two; wrap up warm, and never mind the cold; and you will imbibe such a stock of fresh air as no Turkish bath ever can or ever will give you. If a place on the engine is not to be had, open the window of the carriage, and take your fresh-air bath as it pours thousands of cubic feet of oxygen and ozone into the “gas-pipe” of your lungs.

“‘Stone, ‘Stone;” cried the porter, as the train ran into Aldermaston station, having left Reading some ten minutes behind us. My kind host and friend Mr. Higford Burr, was there to welcome me to his hospitable mansion, Aldermaston Park, and away we went, talking of all sorts of things—scientific, literary, and sporting.

“I want you to examine my decoy,” said he: “it is swarming with wild ducks, and I shall soon begin to shoot some of them.”

Accordingly, on the following afternoon—a beautiful, bright, shining afternoon in December—off we started to visit the ducks’ home. Across the beautiful and ancient park, amid the

Oaks, the brave old oaks,

planted, probably, about Henry VIII.'s time, and the head-quarters, in summer time, of fairies and elves, but who, delicate creatures as they are, I fancy hybernate in the old trees in the winter, and don't come out much before the warm nights in June, when there are plenty of them in the park at Aldermaston. Amid the ferns, where the deer jumps suddenly up, stares round for an instant, and is off with the wings of the wind. Close to the herd of little rough-coated Scotch cattle, who stare at us with their big eyes. Pheasants get up with a startling whirr, and fly comparatively slowly and amazingly near us. Under the mistletoe boughs growing *on thorns*: mistletoe does *not* generally grow on oaks, and the Druids preserved that which *did* grow on oaks, because (at least so says the antiquary of our party) it was a rarity. The call for, and the intended entrapment of the young lady of the party to examine a most curious plant which, by a strange coincidence, happens to grow just *under the mistletoe* high up in the tree. The discovery by the lady aforesaid of the conceit, and her happy escape. The big dog and the little rabbit—10 to 1 on little White-tail; in he pops into his burrow, and the big dog is brought up by a furze bush and looks silly—

And we laughed, Ha-ha;

And we chaffed, Ah-ah!

We soon came near the decoy. "Quiet! hush all of

you !” said the Squire, “ or you will frighten the ducks. Catch the dogs, and lead them.” And we all became silent and submissive, and crept along like a row of Polytechnic ghosts. A few steps, and we see the pond. The utmost quiet is now necessary. A—tisha ! a—tisha ! “ Who is that sneezing ?” cries the Squire ; “ I wish you would be quiet.” Everybody looks at his or her neighbour to see if he or she sneezed, and looks “ *it was not I, it was you ;* ” and the wag of the party points to the big, innocent-faced dog, as much as to say “ That’s the culprit that sneezed.” A titter from the party, and somebody begins to talk. The foremost file turns round, and threatens with a big walking-stick. The word “ March !” is passed along, and away we go, twining like a long snake round a corner into a dry ditch. Along the ditch, which seems to have been *purposely* strewed with quantities of the most fragile sticks, that break under the foot like crackers on the 5th of November. And we arrive at last at the look-out house. The ladies get up the bank, and look through the peep-holes ; the gentlemen crawl up and thrust up their heads in a long row, like masks at a pantomime.

By Jove ! what a sight !—everything is as still as the inside of the exhausted receiver of an air-pump. Before us a sheet of water as calm as a looking-glass, and on its surface hundreds of apparently tufts of grass, also silent

and motionless. Presently a tuft of grass begins to move, other tufts follow it, and away go a long string of wild ducks and teal, paddling away in a row to some well-known hiding-place. These cunning creatures are on their guard; they know we are on the land as well as we know they are on the water, and they perform numerous evolutions, like Volunteers at a field-day, and then "form squares" and are quiet again.

At last the old wild duck, the sentry, is quite satisfied that there are strangers about. She sounds the loud trumpet of alarm—"Quack, quack, q-u-e-e-r-k!" The army of ducks to a bird know the signal; in an instant a thick cloud of birds rises from the water, now covered with moving ripples and no longer motionless. Away they go like a swarm of bees; they are off for the night, towards the setting sun. No they are not; the leading duck, like the trumpeter of a cavalry regiment, sounds "Right wheel," and then "Forward." Back they come again over our heads, like a flock of gigantic desert locusts. The noise of a thousand wings strikes our ears—nature's wondrous music, to be imitated neither by human voice nor human instrument. They see us; "Sound a gallop!" says the Commanding Officer duck. No bullet would catch them now in a fair race. "Skirmishers out!" sounds the trumpeter, and they break up instantly into companies of twos and threes; these at once assume the triangle form, and go off far, far away

into the deep blue sky. Less, less, less every minute they become, till at last they vanish altogether—a famous study of practical perspective, which must be highly interesting to the sportsman who has been out half the night in the cold, and has missed his shot after all in the dawn of the morning. “Look out, here is another lot of birds coming!” Again a different sound of wings, like a minor key to the major of the wild ducks’ wings. Teal, are they? very well, my friends, fly your best now; but recollect cayenne pepper and a sliced lemon await those tender breasts of yours before Christmas-day; so you had better make the best of your time now.

Splash, splash; the most courageous of the birds are coming back to the far end of the pond. Mark how they alight; they open their web feet, come down, as the Yankees say, “slantindicular,” and break their fall into the water by pushing the water up before them in a long and continuous splash. The “Manual of Deportment” gives full instructions to young ladies, who need the same, as to “how to enter a drawing-room gracefully.” Doubtless, the old drake teaches the young lady ducks how to enter a pond with grace and elegance, and we see the result of her training exemplified before us.

But it is near four o’clock; Sol, the red-faced, has just begun to dip over the Berkshire hills; the ladies want

their tea, and the ducks, doubtless, their supper. Our worthy host offers to lionize us round the pond, and show us where the ducks take their morning airings, and how he manages to shoot them when they are getting too thick. He also shows us an elaborate wire trap, that looks like a huge aviary with an ingenious contrivance to pull the door, from the hiding-house in the dry ditch, *when* the ducks have gone in it; but though the trap has been there *many years with the door wide open*, and food inside for the ducks, they have never *yet* gone in, and it would seem that they never *will* go in. They are Berkshire ducks, with plenty of brains under their green and gold feathered winter caps, and not like their cousins the Dutch ducks, who seem to delight in being inveigled into danger and having their necks stretched by an inglorious Laplander.

"Come along, come along there!" cries the Squire, from afar off. We form a V, like the wild ducks, to see if we walk more easily this way than in single file; and are soon warming our hands round the cheerful fire, while the great metal griffins, the guardians of the logwood blaze, seem to welcome us after our delightful walk through this charming old Berkshire park.

A SHOT AT THE WILD DUCKS.

"It is splendid weather for the wild ducks to-night. I only hope the wind may not get up before morning. It is very remarkable, but on a windy morning the ducks never come in any number to my pond," said the Squire, as he looked out of the hall-door of his hospitable mansion, a few days after our visit to the decoy. "I shall be sure to call you all very early, so mind you unbutton your eyes pretty quick:" so we lighted our candles, and away we went up stairs. Some time before five o'clock next morning, the alarm went off with a ring, ring, ring. I looked for a boot to throw at it, which effort woke me at once; and, jumping up, I looked out of the window. It was as dark as pitch; no wind and no moon. So far all was favourable. On going down-stairs I found the Squire crouched over a log of wood, which was burning splendidly. He was most triumphant—his plan for banking up the fire over night having turned out to be perfectly successful: he was busily engaged boiling a caldron of milk for breakfast.

"Quite right, my friend," said I; "I recollect Sir Benjamin Brodie saying to me when first beginning the

noble science of practical surgery, 'Whatever you do, my lad, never go out without breakfast of *some* sort; and the best thing is milk.' " And so, too, one finds the old soldier generally getting "something to lean his back against all day " before he goes out in the morning.

Then our party came down one by one, the guns were produced from their cases, the leather pouches containing the cartridges for the breech-loaders taken down, and we were ready to start. A nice lot we looked, just like a gang of conspirators about to enact some horrible midnight tragedy, wrapped up, as we all were, in heterogeneous costumes, to face the cold air. The ponderous bolt of the hall-door shot back with a loud click, and we were in the open air.

"What is that?" said my friend, the Rev. C. Wolley, of Eton College, who formed one of our party. "Tu whit—tu whoo; tu whit—tu whoo. I know the cry well; it is an owl. Listen."

"It is an owl," said the Squire; "I don't allow the keepers to shoot them; they do more good than harm, and that fellow lives in an old tree somewhere up by the 'corner oak.' But, Buckland, you made a mistake about my oaks; they are very much older than Henry VIII.; it is much more likely they date from about the time of the Conquest—at least, my predecessor, Mr. Congreve, who was very learned about Oaks, was of that opinion."

"By Jove, how terribly dark it is!" I exclaimed, as I ran bang against the iron park-railings. "Where the deuce is the gate?"

"Here it is," said the Squire. "Now, I'll light a cigar and lead the way. Hark! there is the owl again."

"Oh, no," Mr. Wolley said, "it is——" We all listened. "Cock-a-doodle-do."

"It's only old Chanticleer in the farm-yard," said the Squire; "but we are out after ducks, not owls—so come along."

We formed single file, and away we went across the park. Here the shadow of the trees and the deep gloom of the heather made the darkness doubly dark; and unless we followed the cigar light we invariably came to grief in furze, fern brakes, or ditches.

"What a pace you are going, Squire!" said I. "I don't feel half so cold as I did at starting."

"Never mind," said he, "we must get along."

"This fun reminds me," said I, "of the midnight expedition of the Grecian princes, Diomed and Ulysses; and nice fellows they were for princes, to go out at the middle of the night *horse stealing*, and drive off the four greys of Rhesus with the string of an unbent bow,* for

* Ulysses now the snowy steeds detains,
And leads them fastened by the silver reins;
These, with his bow unbent, he lashed along;
The scourge forgot, on Rhesus' chariot hung.

he left the whip in the chariot, in the middle of the night. Do you not recollect what Diomed said when Ulysses was going ahead too fast?

But let us haste, night rolls the hours away,
The redd'ning orient shows the coming day,
The stars shine fainter on th' ethereal plains,
And of Night's empire but a third remains.

So off we went down the long walk. Where is the turning? Oh! I can feel the rail round the young oak—it is too dark to see it; and now I feel gravel under my feet. All right; right wheel, go ahead. Along through the dark furze brake, and down the hill. Ah! there's the pond, and no light yet; we are in plenty of time.

"Mind the plank over the stream," said the Squire, "I will lead the way. Look out, here is another terrible plank." Splash! "Who's that gone in?"

"All right," said a voice behind. "Confound your planks, Squire, I wish you would make them wider; but I have only one foot wet." Flop, flop, flop, hi-r-r-r.

"*There* now, you see what you have done!" said the Squire; "a lot of ducks have heard us, and are gone from the pond. Now silence, if you please, gentlemen; and put out your smoke. Here, Buckland, you get into the dry ditch with Mr. Wolley and Mr. D——; I will stay here, and H——will go to the head of the big pond."

So we crawled down into the ditch, and coiled ourselves up in the dead leaves and ferns like so many

hedgehogs. The darkness was most oppressive, the silence almost awful. At last, in the far distance, a loud half-cry, half-sound, something like a railway engine blowing her steam off.

"Good gracious! what on earth is that?"

"It is the poachers going home," whispered Mr. Wolley.

"All right," I said; "it is no poachers, it is the cow-boys and the labouring lads going out to work; they always signal to each other in this manner before sunrise, but it is a curious custom."

Silence again. I will have a look over the pond with my race-glasses. They tell me they are capital for night-work. No, there is nothing there; the water is as still as a looking-glass. "Hiss, hiss, hiss! errh-errh!"

"Hark at Master Screech-owl," said my companion in the ditch; "he knows we are after no good. He is somewhere up the pine trees close behind us."

"What on earth is that new and curious noise? I never heard that before," said I. Mr. Wolley whispered in my ear these words:—

Τοῖσι δὲ δεξιὸν ἦκεν ἐρωδίδιν ἐγγὺς ὁδοῖο
Παλλὰς Ἀθηναίη. τοὶ δ' οὐκ ἴδον ὀφθαλμοῖσι
Νέκτα δὲ ὀρφναίην, ἀλλὰ κλάγξαντος ἤκουσαν.*

* Just then in sign she favoured their intent,
A long-winged heron great Minerva sent;
This, though surrounding shades obscured their view,
By the shrill clang and whistling wings they knew.

Iliad, x. 274-6.

A heron, is it? What a fellow that Homer is!—what a splendid description of what we have just heard! I wonder if Homer ever went wild-duck shooting. Anyhow, it is a good omen.

A cigar-light is struck in the distance. "What's that?" "Oh, it's the Squire, just to remind us of his position, and a hint as well to keep quiet."

"What's the time?"

"Fifteen minutes to seven," said I; "you see, it's getting a little light."

How very gradually the light comes on. What a lovely scene! The folks talk of scenes at theatres—what can beat this, even though our opera box is a damp ditch?

"The ducks will be here in five minutes," said Mr. Wolley, "so look out."

The words were hardly spoken, when a rustling as of ladies' silk dresses came directly over our heads.

Splash, splash! in the further pond. That's the first lot anyhow. Three dark forms suddenly come over the trees on the right, and splash down into our pond they go.

"Can you see them, Buckland, with the glasses?"

"Yes, there they are, just in front of the weeds!"

Bang, bang! from the other end of the pond.

"The ball is opened then," said Mr. D——, "then I begin also—here goes!"—Bang, bang!

"All right, he is a croaker," said I; "I can see him through the glasses kicking and twisting about."

There come the ducks again—eight this time. Oh, hang it! they are gone to the lower pond—bang! They go away again like the wind—that is to say, some of them—for the Squire has given them toko and a warm welcome.

"Look out! over your head! quick! Here he comes—a single fellow from the last lot."—Bang! That's a capital shot.

Aëriâ vitam sub nube relinquens
Sternitur, exanimisque tremens procumbit humi—*duck*;
Et resonant penitus concusso in viscere glandes.*

He falls with a heavy thud right into our ditch. I grab him in an instant. Poor beast, how he bleeds! wring his neck and put him out of his misery.

Oh, bother! how light it's getting. "Who can that be blowing that horn?"

"Oh, that's the postman; it's past seven. Quick! the ducks will begin to come again directly."

A rush over our heads like the first gust of a coming high wind. Some eight or ten more birds come over. Up go the guns—too high; it's no use, they will go to the lower pond. Immediately, bang, bang, bang!—a

* So leaving his life in the clouds high up,
He fell to the ground with a mighty wop:
And the acorns rattled within his crop.

regular *feu de joie*, at the lower pond. But who the deuce can the third gun be? for only the Squire and his son are there. Never mind, look out again! Now it's our turn. Teal, for a thousand! by their flight. In our pond this time. Bang, bang, bang! Ah, capital! only one of the lot gone, and he a pensioner. Never mind; the watchers on the hill-top will mark him, and we shall get him as we go home. There they are again—quick! Down come four widgeon on the pond. They just have time to touch the water with their feet, when—bang! Too late, my friends, you should have seen us before; two of your party are left behind. Ah! you may well fly your fastest; you have had a narrow escape. Spatter, spatter! hot coals in the ashes. Never mind; it's only the shot falling into the water from the Squire's last shot. Thank goodness, there is no ice, or the shot would bound with a ricochet along, and would not even know where to stop. The birds have not done coming yet, I declare; down with you, out of sight: here comes a famous lot singing “ping, ping, ping” with their wings. Stupid brutes! cannot you see what has been going on since you have been away? do not you see your relations and friends all over the pond dead and dying? No, you won't be told; then take that. He is down! yes! no! yes! Mark the place. Crack, crack! goes the strange gun. Down fall a couple. The poor things

are bewildered. Here they come again over us. No ; it's no use : away they twist and turn like an eel coming down stream to get out of the way of a post. But they have their revenge. They have sent out their sentry ; look at him high in the air, trumpeting querk, querk ; round and round he goes, to warn his friends who are coming home "with the milk in the morning" that their home has been disturbed, and that enemies are ensconced behind every bush.

A long quiet. No more ducks appear. "It's pretty nearly all over now," sings out the Squire, for the first time breaking the silence ; "you can come out of the ditch now, I think."

"Splendid fun, Squire," we exclaim, "though only twenty minutes of it ; and look at the ducks ! But who was the third gun on your pond ?"

"Ah !" said the Squire, "it's the head-keeper : I told him last night to come up, and I gave him what I thought was a place just for a chance shot, but you see he has had more shots than any of the others. I will sound for him."

The Squire then blew upon a little horn, which sounded exactly like those used on Belgian and French railways, and which can be heard an immense distance—a most capital instrument for signals in the field. This was the signal for everybody to stop shooting, come out of their hiding-places, and collect forces. The

under-keepers appear as if from the ground, and one of them unpadlocks a little boat, and paddles out to pick up the ducks. What a sight was there in the early morning! Here a widgeon floating on his back, his head sunk deep in the water, his feet stretched out like sails to a boat; there a duck floating, as in life, on her breast, with her head and neck in the water, as if feeding among the weeds; far away a teal—a mass of feathers, evidently shot from behind, and much denuded of its plumage. Somebody has shot the king of the pond. Look at him; the poor old fellow is floating on his side, with one wing thrown open, as a man opens his coat lappel when about to say a good thing after dinner; his glossy, emerald-green head reflects the bright rays of the morning sun, which his acute and wary eye—now alas! closed—shall never see again. His full, plump breast is covered with feathers and down, stratified and arranged, till they form a water pillow soft as cotton wool, yet as impenetrable to water as a sheet of macintosh. His beautiful orange-coloured feet, but so lately puddling about the oozy banks and mud of the fair river Kennett, are now stiff and cramped in death! You are, indeed, a splendid fellow, and it seems almost cruel to kill you.

“Here, hie in, good dog! fetch him out.”

The faithful retriever—deaf though he be—sees the king of the duck-pond; he goes a little way into the

water, whines "How cold it is!" and at last, summoning up courage, plunges in—like a noble-hearted dog as he is—swims for the bird, takes him in his mouth, with a delicate touch such as a courtier might envy when handing her glove to the fair lady of his choice, and swims back towards the bank, looking with his great beautiful eyes for the expected pat and "Good dog!" which his kindhearted master is sure to give him. Here comes the keeper from going round the pond, with the dog and the boat. Well done! what a fine lot of birds! Put them down, and let us examine them. Where are my pocket-scales? Drake, 3 lb. 1 oz.; drake, 3 lb., &c., &c.; drake, 2 lb. 15 oz., (a good bird), $2\frac{1}{2}$ lb., &c.; widgeon, 1 lb. 14 oz.; teal, $\frac{3}{4}$ lb., &c., &c.—not a bad lot for about twenty minutes' shooting. Halloa! what makes this great mallard rattle?—he has been eating something precious hard. I will soon see what it is. Here is my dissecting-knife. Acorns, by Jove! and what a lot of them—a good large handful. We will plant some in commemoration of this fellow's memory. I wonder where he got them. He has found out some snug feeding-ground, and selfishly kept the news to himself, for none of the others have acorns in their pouches. A splash, a rush in the weeds in the pond close by where the dissection is going on; the dogs stare and whine, and prepare to jump in. Everybody turns round.

“What is it?”

“A rat,” says one.

“A moorhen,” says another.

“Shoot, whatever it is,” says the Squire.

Bang! goes Mr. Wolley’s gun in an instant; and as fine a *jack* as ever I saw springs some two feet out of the water. He flounders about, and as he is just escaping, a second shot settles him. The dogs jump in, but will not mouth him; so the Squire, who has wading boots on, goes in and catches him by the eyes.

“Well, I am glad,” said he, “we have bagged this rascal; this accounts for the disappearance of my young ducks from the pond. He is as plump as a Christmas pig, and you may depend upon it he has eaten his own weight in young ducks in the course of his life, and I am very pleased to get rid of him out of the pond.”

“Give him to me,” said I, “he is another subject for the scalpel, and I should like to see where the shots have struck. See here, his head has five or six shot-marks upon it: where are the shots?”

I examine most carefully, but they have not penetrated, they have not gone into the bone of the head. The fish, then, must have been stunned by the concussion of the water more than by the actual blow of the shot. This is very curious, for I did not know that water could stop shot like this.

“But how about breakfast; are not you hungry,

gentlemen? "Let us be off, it's nearly nine o'clock," said the Squire.

We pack up our warm wraps, and give them to the under-keepers; beating the ground as we go home, bagging a hare and a squirrel, which latter the Squire declares is capital eating, and which he shoots on purpose for me to try and report upon. We soon arrive home, and during breakfast discuss the events of the morning, and particularly how it was that the jack was killed without the shots having entered his head. This curious fact led to a long correspondence, in the course of which many remarkable facts were elicited. I refer my reader to the Appendix.

JACK-FISHING ON THE AVON.

WE came down the incline into Salisbury by the express train at a fearful pace; round the curves and over the embankment we flew with a speed that took one's breath away, and dashed into the station like a comet.

A rush for a fly (for it was a fair day) and off we went to the Star Hotel, Fordingbridge, where we were cordially welcomed by the civil and obliging landlord and his wife, Mr. and Mrs. Bill, and our friend Mr. Cholmondeley Pennell, who preceded us in order to try experiments on the Hampshire jack, which were said to abound in the deep waters of the Avon. "What sport?" said I. "I have had four days' fishing and have caught thirty jack out of thirty-six runs (the largest fish running between 6lb. and 9lb.), with a spinning bait. The water, however is very bright, and the weeds very high. I have got an order for a splendid place to-morrow, and hope we shall have luck."

Accordingly, on the following morning we got ready for the start. Great cans with the bait, the rods, luncheon, tackle, &c., were all placed in the landlord's

four-wheeler, and in we jumped. "I will drive," said Pennell; "all right behind? let go." The ostler let go but not an inch would our noble steed proceed; she put back her ears, shook her head, and made an attempt to kick, foiled, however, by the kicking-strap. The ostler then tried persuasion, but it was no use—the mare reared back, and made another false start. The coachman then touched her with the whip and we were off at last, first a walk and then a trot and then a gallop. We had not gone ten yards before the mare all of a sudden turned right round in the shafts; she first wheeled to the right and then suddenly to the left, the four-wheeler going in the opposite direction. She then began to kick, and backed right into the railing. Out went the landlord and ostler from behind, the coachman and myself from in front. I was nearest the railing, and took a Leotard-like leap at it, mercifully not falling, for in an instant down came the mare on her side with a crash, breaking both shafts short off, and kicking and plunging furiously. She did not, however, touch me, though I was between her and the railing; but it was a very narrow escape. We disentangled the mare, who was not much hurt; picked up the live bait which were flopping about in the dusty road; and walked back to the hotel as dignified as circumstances would permit. Another horse was then put into a borrowed dog-cart, and we had just got to the place of the former accident,

when the shafts began to elevate their noses in a most unpleasant manner; the old grey seemed to be walking on his toes, being almost lifted off his legs.

"Out with you, gentlemen," said the landlord, "or we shall all be over again;" so we all jumped off like artillery-men from a gun-carriage.

"Is this what you call going out jack-fishing, Pennell?" said I. "I don't see much chance to-day. We have been just two hours getting ten yards from the door, the live bait is dead bait, and one of the rods is smashed."

"Never mind," said P., "let's go into the garden and catch more bait."

So we got into the landlord's punt and began to fish for roach and gudgeon. I discovered at the bottom of the boat a huge wooden mallet with a broken handle, a terrible-looking instrument.

"What is this instrument for?" said I.

"Oh, that's what we use to knock the jack on the head," said Pennell, "they are such tremendous big jack about here."

Hearing this I thought no more of the accident, and away we went once more,—this time getting a fair start.

We soon arrived at the mill, where we found the keeper awaiting us, who told us his master had sent him down to attend upon us. He seemed rather surprised at our small baits, "For," said he, "in the

winter we generally use very large tackle, and fish with a roach from half to three-quarters of a pound in weight; but I think Mr. Pennell's tackle very good to spin over the weeds, which are terrible thick about."

The keeper was right; the river was one mass of dense solid forests of weeds, which waved about in the rapid stream like great sea snakes. Between them, however, were here and there streets and lanes of beautiful deep water, looking almost ink colour on account of its depth and the darkness of the weeds, the water itself, however, being as clear as crystal.

"Any big jack, about here, keeper?" said I.

"I will show you one, sir, at once, and you shall judge for yourself."

We proceeded to a little house built over a stream, which was railed in. "Look there, sir," said the keeper. "Go quietly." I looked over, and there lay a giant jack, sunning himself, and basking, like a great dog, in the shallows. I crept quietly up, and looked over. He was indeed a monster. He lay as still as a log of wood, just moving his gill-flaps, and looking straight at me with his savage-looking eyes, which, by the way, he did not turn about like a roach or a gold fish. He supported his great body on his ventral fins, and gently feathered the water with his pectoral and caudal fins. I moved the water with the end of my rod; in an instant he was off like an arrow, stirring up

a cloud of mud, which gradually spread itself all over the fish stew.

"By Jove! keeper," said I, "he is a fine fellow."

"Well, sir, he has been in here some time now; he was between 23 and 24lbs. when he was put in, and I do not think he has wasted much. He feeds well upon large bait and little jack, and has killed lots of the miller's young ducks. If they once get into the stew, the big jack will have them, and they will never quack again. There is a fellow jack to him down the river a little way, and we had him in the net once, but he went through it like a cobweb. They are very dainty, artful fellows, these big jack, and require a deal of catching; and the best bait for them would be another jack about three pounds weight, if you gentlemen could manage to spin with him. There are bigger jack than him though in the river, for last winter they found a jack among the weeds that weighed thirty-two pounds. He had a number of hooks in him broken short off. There was nobody that took notice of him, so they buried him in a dunghill." Hearing this I nearly fainted in Pennell's arms: the idea of *burying* a jack thirty-two pounds in weight, and wasting such a magnificent specimen!

"Show me his grave instantly," said I. "Where is the dunghill? I will soon have him up."

"It's no good, sir. He is all to bits by this time:

besides which, sir, you could never have touched him, the smell was terrible."

"Smell," said I. "I know how to tackle a smell—Cond's fluid is the stuff. Besides, what do I care for smell, when there is a chance of a good preparation?"

"I don't want to excite you, sir," said the keeper; "but we caught once in the net three jack that weighed fifty-three pounds; the keeper at —, some six miles below, has got a jack in a pond that's waiting till he is wanted for the house, close on twenty-three pounds, and he found a dead one last winter that was pretty nearly as big as that found in Mr. Bill's water."

"You have a good many jack in this stew sometimes, keeper?"

"Yes, we have, sir, and I will tell you a curious thing: One day I put in a jack that had a gorge-hook in him, for the gimp was just sticking out of his mouth. I did not take him again for six months, and when I came to look at him I could not find the hook at all. As I was cleaning him, something hard struck against the edge of the knife, and I found it was the gorge-hook that had worked itself right through him, and was nearly coming out. It was quite loose in the intestine, and did not seem to have injured the fish, for he was in good condition, and I know he fed while he was in the pond. I think the jack eat the eels in the summer time (there are plenty of them about); and as good a bait as

you can use for large jack is the tail of an eel, but it won't spin very well by itself; you must cut about two inches of the head off, and sew it on to the tail part, and then it will spin beautifully, and you can fish with it all day without it's tearing much. But hark! your friend Mr. Pennell, is crying for the gaff. We must be off, sir. Run! it's a good fish from the bend of the rod."

Off we both started as hard as we could go—the keeper going over a broad bridge, and I myself floundering, head-over-ears, bang into the muddy water and rushes of one of the water "carriers," and getting my first wetting for the season.

"It's terribly hot," said Pennell; "how I envy those cows in the water! I have been a long way up-stream, and this is what I have got. I saw a beautiful quiet dyke, about five yards wide, and at the first cast I was delighted to see a huge wave issue from the side of the bank. Slacking the speed of my bait, I let him have it fairly, and struck him as he turned for his home; he made a gallant five minutes' fight, and has left this 'line cut' on my finger as a mark of his prowess. As I knew these big jack generally hunt in couples, I took another cast, and hooked an equally fine fellow, within two yards of the spot where I caught the first, but I unluckily lost him when at the last gasp for want of the gaff—which, by the way, I see sticking out of that

capacious pocket of yours. The fish I 'now produce' (as the Peeler says) will turn the scale at 9lb. I found the sun very powerful, and my head would have ached considerably if I had not adopted my usual plan. I will tell you what you ought to do. Just get a handful of water-weeds out of the river, wet them and put them in the crown of your cap, it will make your head as cool as a cucumber."

"Well, I suppose I must give *you* a wrinkle in return for this," said I. "Do you know how to keep away midges and mosquitoes when you are fishing?"

"No, I do not," said P.

"Neither did I, till last night, when reading that delightful book, '*Life in Normandy*.' I learnt that *turpentine* (I suppose spirit of turpentine is meant) will keep off all the midges in the parish. The author, a true sportsman, says: 'It is singular how little this is known. Many a man has suffered martyrdom when a single drop of this turpentine would have protected him as effectually as a coat of mail, and allowed him to enjoy a good day's fishing.' I for my part do not intend to forget this. If I were about to fish in a 'midgy' locality, I should order the chemist to make up the turpentine in what we doctors call an 'elegant formula,' which he can easily do: and an ointment thus made can be agreeably spread on the skin of the face and hands."

“What have you been doing all this while?” said P.

“Well, I have caught one jack, and I have been dissecting him nearly all the time; but I cannot make out what is the use of those curious blind holes (not the nostrils) that one finds all about his head; there must be some use in them or they would not be there, and I do not think anybody knows. Besides this, I have been considering how much the power of sight in the jack predominates over that of scent. The fish I caught must have seen my bait at least ten or twelve yards off, for I saw him start from his lair in the weeds, and he came at it like a rocket, almost pulling the rod out of my hand when he got it. He could not have smelt it, though he has nostrils. Depend upon it, a jack’s eye is like a telescope to his owner in the water.

“Do you know that whales have a considerable power of smell? It is supposed to enable them to ascertain the whereabouts of the enormous masses of that minute gelatinous sea creature the *Clio borealis*, on which they feed; whereas porpoises, which are rapacious in their habits, and do not hunt by scent, have the organs of smell but badly developed. As well as dissecting, I have been talking to an old man I met at the weir. He is the real original ‘oldest inhabitant’ of the place, and he says he has been about the mill as man and boy all his life. He is now seventy-seven, his sister is

eighty-two, and her husband eighty-seven. This county must be very healthy, for in Fordingbridge churchyard, if you recollect, we found last Sunday after church, on *four* tombstones almost touching one another, the names of seven people whose united ages gave the total of 547 years, being an average of seventy-eight years each; the youngest was *only* seventy-one. Do you know what they do in the Isle of Wight? They make all the old people of the place go and sit at the doors of the cottages, and then point them out to visitors, making, in fact, an advertisement of them to cause invalids to come to reside in the village. I wonder the Fordingbridge people do not do the same. My old man's reminiscences, being a miller, are of course all about the mill; and the principal fact in his life seems to be that he recollects when flour was 3s. 9d. a gallon, and barley-flour half-a-crown a gallon—but that was in the war time; he says, moreover that he has seen out three of the Squire's gamekeepers, and one of the parson's, and that he is still 'healthful.'

"Besides all this, the old man has been showing me the eels in the eel trap by the weir; they are caught on the stage, and the miller says they get sometimes 10 cwt. of a night when they are on the run, and that the moment the moon comes out they cease to run. They are packed up in baskets called 'flats,' covered over with 'spear,' i. e. reeds, and sent away to Salisbury for Lon-

don. The price at the mill is 6*d.* per lb. in quantities. I wanted to buy some for our dinner, but I could not unless I bought 45lb. weight, and don't think we could manage this little lot at a sitting. I have, moreover, had an interview with the wild eels themselves in the river. I was trolling with a dead bait, and thought I had a run, for the line went out famously, and then stopped all of a sudden. I waited a long time, watch in hand, like the man in 'Punch's' picture, and then the keeper looked quietly over the bank to see what was going on. He reported that an eel had got hold of the bait, so I put the rod on the bank, and went to look myself. Sure enough, there were four or five large eels round the gorge-bait, which they were all worrying like a lot of hounds; they rushed fiercely at it, and then taking a bit in their mouths stretched themselves out at full length quite stiff, and twisted their bodies round and round with the velocity of a spinning jenny, till they had twisted a bit clean out. When one of them had got a mouthful, off he went among the weeds, and another eel took his turn. There seemed to be a whole colony of them under the roots of a willow, for they came out in regular succession, one after the other, had a nip, and went back again to their hole. I watched them some time, and at last, when one fellow was in the midst of his gyrations, I twitched the bait suddenly out of the water. His teeth were so firmly fixed in the

bait, that I whisked him out on to the land, and fearfully astonished he seemed to be. The eels had taken every bit of the fish, all but the head, from the gorge-hook. The eel I whisked out was a snig.

"I see you mention and figure him in your 'Angler-Naturalist,' and this story will do for your new edition. Suppose we dissect him at once to see for ourselves the difference in the cervical vertebræ. See here, the first half-inch of his spine is almost round, and nearly as smooth to the fingers as a cedar pencil, whereas in the broad-nosed and sharp-nosed eel each vertebra has a spine on the side projecting like the barb of a bone fish-hook made by Esquimaux. You may depend upon it there is nothing like looking at such things for oneself, and not trusting to drawings. If you want to make good preparations of these eels, boil their heads till the flesh is quite soft, and then pick it off with a penknife, or scalpel. But now we must be off home, for I am terribly hungry, and I don't care to be driving that noble grey steed along in the dark."

So away we went home, not, however, to finish the adventures of the day, for when preparing for dinner, I was alarmed at hearing a terrible cry of "Murder! To the rescue! Help, help!"

"Good gracious! what is that?" I exclaimed, and out I rushed.

A fearful noise was going on at the end of a passage,

where there was a door: I opened it with a bang, and found myself an intruder upon the Theatre Royal, Fordingbridge, viz., the room connected with the hotel, which the landlord, Mr. Bill, lets out for public occasions, from solemn county court assemblies to lectures and theatrical performances. Dinner over we of course joined the audience—reserved seats, sixpence; everywhere else, threepence. When we came in, a love scene was going on between a lady and a gentleman, decided Londoners dressed up as rustics for the edification of the real rustics. The lady was complaining that her mother's magpie had informed her that the gentleman had been "flirting on the sly," to which the faithful swain replies that "your mother's magpie tells a jolly lie," the interlude between the various parts of the conversation being occupied by the engaged couple performing a *pas de deux*, and then your mother's magpie chorus again.

There was a peculiar out-at-elbows appearance about the whole of this theatrical business, whilst the scenery was of the rudest description. A few boards had been placed for a stage at the end of the room, and the wings of the theatre were just boards, placed at right angles to the stage, leaving hardly standing room, and two small corners which acted as the dressing and retiring-room. The scenes were but three in number, one representing a dwelling room, the other a forest, and the third (the

best) the actual end of the room. These three scenes did for every play. A piano, much out of tune, was played by a woman who once had been pretty, but whose face showed the rude lines of care and misery; though so poor and evidently an invalid, she was an excellent performer, and prattled music out of the jingling old piano, which would have been a credit to any drawing-room. The whole company consisted of six persons, and most extraordinary and clever shifts were adopted by them to carry out their acting. There was, however, such a peculiar careworn and poverty-struck looking appearance about all these poor creatures, that I was determined to learn more about them and their sad story.

The manager, I learned, had been proprietor of several theatres, and had made some considerable sum of money, but had lost it all by theatrical speculation; his wife had once been a star of London theatres, and having a magnificent voice, earned an excellent living. The proprietor had married her, and was with his wife doing a good business when, through simple hard work and over exertion in singing, one day her voice broke down in the middle of a song, and she lost not only her power of ever afterwards singing, but almost of even talking, for the poor thing can speak only just in a faint whisper. She has, besides this, had a large family of ten, seven being alive. The eldest boy performs the "Cure," the

youngest, the baby, is huddled up into a corner while the mother is playing the piano. The next principal performers are a man and his wife, both of respectable parents, and who, I was given to understand, were stage-struck in their youth, ran away from home, and got married ; years ago the wife took the part of " walking lady," that is, the lady who acts the part of the " beautiful daughter," and who does nothing much but walk about, look graceful, and is made love to ; *now*, alas ! she takes the parts of old women and " mothers," and I regretted to hear the market was overstocked with candidates for this character. The gentleman had once been " the singing gentleman ;" he is now obliged to take almost any part assigned him, and right well he does his duty, being, by nature, a capital actor, and no disgrace to the London boards. This company were in miserable circumstances ; they had walked twelve miles, the morning of the play, with all their properties, and a few bits of scenery, in a country cart ; they had gone to considerable expense in advertising all over the town, and were in hopes of obtaining a success. When, however, the curtain drew up there were about fifteen people in the place, most of those being the average specimens of thick-booted, grinning village boys, who were all clustered together in one corner sitting upon the witness-box, used on county court occasions, like a lot of sparrows on a hedge-top. The faces of the poor,

actors fell when they saw "the house," but they bravely however, went on with their performance, "The Lottery Ticket." At the conclusion of this they began the "concert," omitting, with apologies, the "Red Barn." There were but two persons in the reserved seats, which, by the way, consisted of a sofa and some of the hotel arm-chairs. The poor manager's face brightened up a little when our party came in, for we added somewhat to the appearance of plenitude of the room by our presence, and did all we could to lead off the applause, which the country boys followed willingly enough, but were too shy to begin. During the acts we went down into the street, and finding a crowd round the door we paid for and sent in all the people we could find—some four-and-twenty altogether—in the hope that the room would thus look a little less deserted. All we could do, however, failed to make it look anything like full. The audience were, I must say, excessively stupid, and were never once thoroughly awakened except when the son of the old woman in the play, who was suddenly made a lord, rushed into his mother's cottage (the window of which was the natural window of the room, and looked very well), upset the dumplings which had been prepared for his supper, and smashed the plate on the floor in the most lord-like style. This "brought down the house," and almost the theatre also; all the clever sayings, jokes, puns, and forcible

acting that preceded this were quite lost and fell flat upon the mind agricultural.

The play over, I had a long conversation with the manager, who, poor fellow, was in despair. They had done badly at other places they had tried, and had great hopes of Fordingbridge. The first night they had received ten shillings and sevenpence halfpenny, and there was ten shillings to pay for the room, leaving just a profit of sevenpence halfpenny to divide among six adults and three children. The next night they were still worse; and the proceeds of a whole *four days'* performance gave just ten shillings for a man, his wife, and three children, and three shillings and threepence for each of the other performers—this wondrous sum being all they had to support them during the week. The cause of the people not coming, they said, was the harvest time, the country people working hard all day, and neither having time nor inclination to come out at night to amusement. They were literally starving, and the poor woman who acted "The Queen Mother" informed me that she had not tasted meat for seventeen days, and that it was as much as she could do to obtain bread and tea. She had walked many a weary mile that day to sell her "benefit" tickets, poor thing, and when evening came was so weak that she could hardly perform her part. One of the party, a pretty young married creature, had walked

six miles out and six miles home to sell her tickets at a gentleman's house, but had not sold one all day. The children of the manager, though healthy-looking, were not over-fed, and they too were obliged to work, the elder one dancing "the Cure," and singing "The dark girl dressed in blue," whose shrill treble was jerked out at intervals between his shut lips like the squeal of a bagpipe, and then bringing on his little tiny brother, three years and four months old, to take part in a "comic duet." This poor little infant did his part well, his mother playing slowly for him as he danced "the Cure," and encouraging him with her smiles; but when ordered to go on for the encore he became refractory, and was plainly heard stamping his feet and audibly exclaiming, behind the scenes, "I shan't, I shan't." The poor little fellow was, however, very tired, for we took him, after his performance, into our circle, and he fell fast asleep in the arms of my kind-hearted friend, Cholmondeley Pennell. He was indeed a beautiful curly-headed rosy-faced child; what will be his future, Heaven only knows. His father forcibly placed before Mr. Pennell the advantages which would accrue to the urchin if he were adopted by a gentleman, a course which I was afraid my friend would pursue, so much was he taken with the child's appearance and manners.

A cricket match was to be held on the Saturday,

and the poor players stayed for that night, thinking that there would yet be a chance of earning a few shillings. Alas! they were again disappointed; the house was nearly empty, and those present had taken only threepenny places. Still they did not disappoint the audience, but went through "the piece" and "the concert" with braver hearts than could have been expected under the circumstances. When all was over, we asked them in to supper, an invitation which they gladly accepted, and much they seemed to enjoy themselves in friendly converse and a good meal. We found them all to be highly respectable people, well behaved, well educated, enduring without murmuring, but still fighting against the most adverse circumstances, and with a dismal prospect for the future. Poor people! they are off again this morning to tramp along the dusty road to a distant town. We sincerely wish them the success they deserve. How little does one half the world know how the other half lives!

The next morning we went out again, jack fishing. Pennell went away to fish by himself while I stayed behind with the miller talking to him about the best way to get rid of the rats. After a while my friend returned.

"But you have had no real fishing at all," said he.

"Have not I, though? I have been hard at work, and have had, moreover, a famous adventure. The

keeper said he had orders to drag the mill-tail, and as it was to be done some day in the week, and I was fond of the water, I told him he might just as well do it when I was there; so we got the net out—and a famous big net it was—and then, making a sweep, we surrounded the pool, letting it out from the stern of the boat as we punted along. The keeper then put on his water-proof boots, as we had to wade the rest of the way. I got out into the water, just as I was, with him, and we both hauled away at the rope. When we were about half through the distance, and the keeper was hauling the rope towards him, and I had got it over my shoulder, both pulling might and main, in about three feet of water, the rope broke off short in the middle. The keeper went flat down on his back and disappeared among the weeds, floundering like a great porpoise, while I took a header forwards into a deep hole. We both got a sound ducking, and were rewarded only by shouts of laughter from the old man, the miller's family, and two policemen, who came with the instinct of their species, and were glad to get something to look at in a country where their exertions are amply rewarded by one prisoner a month. I myself did not care a rap for the wetting—I had on all flannel, and soon got dry again. The keeper, however, drew a long face, for he was subject to the 'rheumatics,' and had put on his water-boots in order to *keep dry*: he was then as wet

as a water-rat. The net, I observed before I began to use it, did not seem over strong—nets very soon rot—and I most strongly recommended the keeper to ask his master to allow him to tan it with catechu, as the fishermen do at Folkestone, in the tanning-house built by Sir Elias Harvey (brother to the great Harvey), who saw what a wonderful preservative the catechu would be to the property of the poor fishermen.* However, we had a good haul of fish, some magnificent roach, some no less than $2\frac{3}{4}$ lb. weight; two perch, both turning the scales at 3 lb.; and four trout. The poor old man got his share of the roach for his dinner, and the other fish were turned into the stew till wanted for the master's table.

“Did you ever see a dog retrieve fish? If you have not, I can tell you the miller's water-spaniel is a wonderful performer. I turned a roach out of the basket, and he caught it in an instant, diving pretty deep for him. And I think I have made a discovery that dogs—at any rate, this dog—is shortsighted, and that when he cannot use his nose he is comparatively powerless. I put a half-dead roach in the weeds close under his nose, and he could not see it: he tried hard to sniff for it, but of course could not scent it through the water. I repeated the experiment several times, and always with the same result, therefore I am inclined to believe

* See “Curiosities of Natural History,” Second Series.

that dogs do not see so plainly nor so quickly as we do ourselves. We all, moreover, know how difficult it is to get a dog to look at an object just at the moment when we want him so to do.

"I have also observed that dogs will not hunt for things that have no scent. I have tried to make a dog scent a crab, which had just buried himself in the sea-sand at low tide, but the dog's nose would not tell him where the crab was gone. The latter, I suppose, left no scent behind him like a land animal."

"But," said P., "you really must come on fishing, or you will catch cold in your wet clothes." So away we went through a ford that contained as many minnows in the shallow water as there are herrings in a herring-tub; we also saw *plenty* of ducks and *few* trout. I asked the miller about the ducks in spawning time, and he agreed with me that they work the spawning-beds with the utmost regularity, and that they eat all the trout ova they can find, and that they don't leave a stone unturned. Gentlemen, once for all, be assured you cannot have ducks about the river in spawning time; if you *have*, good-bye to the young trout. We then both began fishing with the rod. P. caught a good fish, and then came my turn.

While getting my fish out I had to land him through a thick bank of "spear." I caught hold of a bunch of this hard silicious rush, and my hand slipping with my

weight, I cut a tremendous gash in one of my fingers with a broken stem. There was immediately a profusion of bleeding from the wound which seemed inclined to continue. I had nothing whatever with me to mend the damage, so I began to cast about for an expedient at hand, but could see nothing that would serve as a plaister, and I was miles away from a chemist's shop; at last I recollected I had a bulrush (one of those big-headed rushes, that look like a bottle-cleaner) in my hat, so I immediately broke it in two, and taking a quantity of the down-like seed of which I knew it was composed, pressed it tight on to the wound; in a few seconds the blood made a clot round the seed, and the hæmorrhage entirely ceased; in fact, it acted like "matico" leaf, which is one of the best styptics we have in surgery. Now for some plaister; but where was I to get plaister five miles from a town, and none in my pocket? My eye lighted upon the jack I had just killed. A bit of your skin, my fine fellow, I thought, will just do; so whipping out my knife, I soon dissected a long strip of skin from off his back. This I lapped tightly round the injured finger, over a good wadding of bulrush seed; I then bound it firmly with some fishing-silk, the fish-skin becoming tighter as it dried. I was then enabled to go on fishing, which I did for the rest of the day, and felt pleased at the way this impromptu surgery answered.

It was now time to be off, as we heard the wheels of the dog-cart rattle over the old bridge, on the railings of which were cut marks showing the length of a huge trout that had once been caught underneath it, and we soon arrived at Fordingbridge, where the landlady had a capital dinner for us all ready.

Among the dishes was some ham and eggs. I rang the bell. "Where did that ham come from, Mrs. Bill?" said I.

"From Fordingbridge, sir," said the landlady.

"Are you quite sure? Have you had any Irishmen in the village lately?"

"No, sir."

"Then it's all right, thank you," said I.

"What's the matter with the ham?" said Pennell.

"Oh, nothing," said I; "only I heard a story just before I left London, which makes me rather shy of bacon just now."

"What's the joke?—let's hear the story."

"Well, then, a lady told me that four or five Irishmen came a week or two since to Knaresborough in Yorkshire, where she lived, and set up stalls opposite the butchers' shops. These men brought bacon, which they sold in large quantities at $2\frac{1}{2}d.$ a pound. The butchers were furious, and at last they said, 'We must hit upon some plan to get rid of these fellows; they are ruining our trade, for the people will not buy our meat at $7d.$ a

pound when they can get bacon for $2\frac{1}{2}d.$ ' As the butchers were talking this matter over in front of their stalls in the market, an old woman came toddling up to know what the beef was a pound. 'Sevenpence, mum; we can't sell our beef at the same price as these Irishmen sell the bacon, because—don't you know all about it missus? Why all bacon is made from pigs as comes from 'Meriker; and don't you know, missus, what they feeds them on in 'Meriker?' 'No,' said the old woman, 'how should I know?' 'Why they feeds them on dead soldiers, as has been killed in the war; they picks up the bodies after the battles, and throws 'em into the pig-sties for the pigs—and that's what makes 'em so fat and so cheap.' 'Lord! good gracious, butcher! you don't say so? How shocking! those 'orrid Irishmen!' So off goes the old lady, with her bit of beef on a skewer, all round the market, telling everybody she met, young and old, that the Irishmen's bacon was 'fed on dead 'Merican soldiers.' The news spread like wildfire; a thrifty housekeeper was seen to throw a ham she had just bought for 5s. into the road, and nobody would pick it up; even a beggar passed it with contempt, and the inhabitants cleared their cupboards and larders of every morsel of the newly-purchased bacon. The next Saturday, the bacon men came as usual to the market, and there was not a man, woman, or child near their stalls: they brought the bacon down to three-halfpence a pound—but still no cus-

tomers ; and not even genuine, home-fed bacon could be sold by the regular shops. The Irishmen were furious at the butchers, and the butchers laughed at the Irishmen ; anyhow, the bacon merchants immediately shut up shop, sheered off, and have never been heard of since in Knaresborough. I thought that possibly these same Irishmen might have come on to Fordingbridge, and therefore was anxious to know whether Mrs. Bill's bacon was fattened with English barleymeal or dead 'Merican soldiers. There's a story for you ! Now pass the grog, if you please ; I feel somewhat chilly after my ducking this morning."

BIRD-CATCHERS.*

WELL, a little fresh air will do one good this fine day; where in the world shall I go? Where's the "A B C Railway Guide?" Yes, this will do; I can be back in a few hours, and I have never seen Loughton,* so shall just go there and see what it is like, and come back again; and if I can get a look at Epping Forest so much the better. Well, I soon got to Loughton (in Essex), and a very sober, slow, stupid, cockney tea-and-hot-water place it seemed to be. However, as I have never, I flatter myself, visited any place, however slow, without learning *something*, I determined that Loughton should not triumph over me, and form the exception: nor was I ultimately disappointed, for when walking along a lane whom should I meet but three men, carrying bird-cages in their hands, wrapped in dirty handkerchiefs, while a boy in the rear had a chaffinch in his hand, stuffed in the attitude of an angry bird. I applied my usual key, which I always use when I wish to unlock the knowledge-box of my humble friends, and found

* Near Epping Forest.

that, as usual, donations of beer and cigars soon loosed their tongues. I am a great believer in the power of beer as well as the power of love.

"Where did you come from, my friends?"

"Well, sir, we started from Whitechapel church this morning, at half-past one"—it was then five in *the afternoon*—"and we ain't caught only one chaffinch, and he ain't no great shakes neither."

Being anxious to be initiated into the mysteries of what Isaak Walton would call "fowling," I asked how they caught this bird.

"Why you see, sir, we just walks along and along, till we hears a bird singing in the hedge, or on a tree, and then we sticks this 'ere stuffed bird, which we calls a 'stale' (the bird was wired on a bit of wood with a sharp nail at each end of the wood), into the bark of the tree, and we puts 'the twigs' all about him; then we sets this call-bird down in his cage on the ground under 'the stale.' He begins to sing, and the wild bird answers him, and comes to drive him off his beat. The wild bird thinks the 'stale' is singing, so he goes to battle him, and gets catched by the twigs."

I asked to see the twigs. They are little bits of whalebone, on to one end of which a pin is fastened, in order that it may be stuck into the bark of the tree, close to where the 'stale' is fixed. It is covered with bird-lime, a very precious material. "You see, sir, this

ere little 'bacca-box holds a shilling's worth, and it would take as much holly as a man can carry on his back to make this little bit; good bird-lime is worth a guinea a pound if it's worth a farthing. The birds about here, sir, is pretty nigh all caught up; there is a beauty round by the public-house, but he would not take no notice of us, and the landlord said it was no use a-trying after him, he had been tried after too often; he had got the information, and was regular 'trap-handy.'

"The birds about here is beautiful birds, the 'over-the-water birds' (*i. e.* birds caught Battersea, Crystal Palace way, &c.), ain't nothing to these 'ere forest birds; and we knows where a bird comes from when we hears his voice, and they are different, too, in blumage,* but there ain't nobody as I knows on as knows how this is, and they say the larned gentlemen don't know nothing at all about it neither."

The last bird in the cage then began to sing most beautifully. "Ay, sir, that's one of the best birds in Whitechapel, and he has beat many heavy finches out of time. We sings him against other birds at the public-houses at night, and a better-hearted bird there ain't in the fancy. You see, sir, we must have good-hearted birds when we goes out a pegging (*i. e.*, catching by means of the stuffed bird pegged on to the tree) or

* Plumage.

the other birds won't come to fight him. I would not take a sovereign for this bird from any man. The pegging season is from April to June, and the only other birds we catches in this manner is bullfinches, and then they begins with the flight-nets. We never catches the hens; they ain't of no account; but the good-singing birds is worth now half a crown a bird to sell at the bird-shops; but later in the year we sells hens and cocks mixed at fourpence a dozen. We catches them with the flight-nets; it's no use to go out 'pegging' after their nests is made. We catches nothing but cock birds at this time of year; but it's terrible to hear the poor hen a-crying when she has lost her young 'uns. She will follow us for miles, flying after us along the hedge a-crying 'Pink, pink, pink.'

At that moment the call-bird began his beautiful song again in the cage under the dirty handkerchief, and his owner translated his song into human words for me. "You see, sir, when we sings this bird at matches, we are obliged to listen to him."

"How *do* you know what he sings?" said I.

"Ah, sir, in these matches we are very particular; and if a bird don't *finish his song* we loses a chalk. Do you hear him now, sir? he has finished his song."

"* Well, pray tell me how *can* you know that?"

"Why, sir, you listen carefully you will hear that he says, 'Cha-cha-rattle-rattle-rattle-chop wado.' When

he's a-singing, if he leaves out the 'chop wado' he ain't finished his song, and we loses a chalk."

I then listened, and the above words give as good an idea of the bird's song as human language is capable of expressing.

"Now them over-the-water birds never finishes their song, and this is what *they sings*:—'Chow-chow-sweet my dear.' And some on 'em sings 'chow-rattle-rattle-chump.' It's no use singing matches with them sort of birds; they ain't no use. We are much obliged to you, sir, and we would much like your company with us out a bird-catching. We have got to walk to Whitechapel, a good ten miles; so good afternoon, and thank you, sir."

As I came home I saw a foolish-looking cockney boy with a nest of young birds in his hands. Of course, they would all be dead by next morning under *his* care, and the poor mother is now crying in vain for her young. Ladies, pray forbid the idle boys from bird-nesting, and send your husbands and brothers after them *with the stick*, if you see them looking for nests, and you will be doing much good; for not only do the birds do the gardens great benefit by eating insects innumerable, but consider how *you* would like *your* nest taken away from you, and how you would like to follow the destroyer of your happiness crying, like the poor chaffinch, the mournful "Pink, pink, pink."

Again, ladies should be careful about buying nests of young birds in the spring of the year from the boys in the streets. Last spring a lady requested me to examine some young nightingales which she had bought for a considerable sum. The little half-feathered wretches were all crowded together in a sort of nest, and somehow their physiognomies looked very familiar to me, and the nest was certainly a hand not a bill made nest. However, the matter passed off, and the young nightingales were nurtured and cared for by their owner in the most attentive way, much to the annoyance of Puss, who was carefully put out of the way for the time. As time went on the birds began to show their feathers. Curious coloured nightingales, thought the lady ; but still she continued to tend them. One day I called to inquire after the nightingales, and the lady anticipated my inquiry. " Oh, Mr. Buckland, what *do* you think ? Those *wretched* little birds were no nightingales a bit ; they were only vulgar common larks after all. I wish I could find the horrid man who sold them to me."

NIGHTINGALE-CATCHING.

I now must say somewhat about nightingales and the way in which they are caught by the London bird-catchers. It seems—and it really is—a cruel thing to catch these birds the moment they arrive on the shores of England, which bears such a good character for hospitality to all wandering visitors. Nevertheless the poor birds are caught, though I myself for one would be the last to set a trap for poor Philomela. I met the other day two men going along the street with birdcages in their hands, and a lame boy trudging behind them carrying a sack and a hand-hoe. This hand-hoe immediately betrayed their occupation to me.

“How many nightingales have you caught, boy?” said I.

“Ask father,” was the reply; “we ain’t caught only two, and we have been out some eighteen hours in the [Epping] forest.”

I soon made acquaintance with the father, a tall, powerful-looking, big-whiskered individual, with a quick observant eye, gentle hand, and, what is best of all, a

tender heart. He had caught the two first nightingales of this year, and was about to sell them for half a crown each. He intended going on with this catching till he had executed all his orders; for he had orders to get *three dozen* nightingales, which he hoped to be able to obtain very shortly for his customers—the bird-shops.

He then informed me that, in his experience, nightingales always choose the same locality; that many birds might be caught in succession out of the same identical bush or thicket. Once a good place for a nightingale, always a good place for a nightingale. This he thought odd. I did not; “for,” said I, “did you ever know a good house, or a good comfortable berth vacant among ourselves that we did not always find somebody occupying it?” He told me that he called to the birds, using no instrument but his lips, long practice had enabled him to imitate the nightingale exactly; so well, indeed, that they would answer the song—that is, what they considered to be the challenge of defiance from another bird—but which, in fact, was produced by human lips. I asked my friend to let me hear a specimen of his performance. He said he could not, “his lips were quite dead and numb from calling so many hours.” However, the application of a pewter pot containing beer had a wonderfully relaxing effect upon his lips; and he immediately

began the nightingale's song. I was amazed and astonished at what I heard. The notes he produced were exactly like those of the nightingale, particularly the high and sweet note, "Water bubble," or "Wheet, wheet," followed by the deep-sounding "cur-r-r-r"—the challenge of the male bird to his rivals. The *male* nightingales come over at least a week before the females, and if they are caught *before* the arrival of the females, they will live and do well under proper treatment—but it is not everybody who is going to make them live. After the arrival of the female, not one in a thousand will live. Dr. M'Lean of Colchester, my friend Mr. Coulson tells me, had a nightingale in a cage *twenty-three* years. This was an old bird when he caught it.

I no longer disbelieve the old story of a man being specially retained by the proprietors of Vauxhall or Spring Gardens in days gone by, to sit in a bush and sing like a nightingale. I believe, moreover, that both Sir Roger de Coverley and Mr. *Spectator* were grossly humbugged, especially the latter, for we read that on the 20th of May, 1712, these two worthies took an evening stroll, and Mr. *Spectator* tells us:—

"We were now arrived at Spring Garden, which is exquisitely pleasant at this time of the year. When I considered the fragrancy of the walks and bowers, with the *choirs of birds* that sung upon the trees, and the

loose tribe of people that walked under the shades, I could not but look upon the place as a kind of Mahometan paradise. Sir Roger told me that it put him in mind of a little coppice by his house in the country, which his chaplain used to call an aviary of nightingales. 'You must understand,' says the knight, 'there is nothing in the world that pleases a man in love so much as your nightingale. Ah! Mr. *Spectator*, the moonlight nights that I have walked by myself and thought on the widow by the music of the nightingale!' He here fetched a deep sigh, and was falling into a fit of musing."

I am curious to know how the "choirs of birds" were *managed*. I wonder, too, how much the human nightingale who sang under a bush in Vauxhall used to get as his weekly salary from the proprietor of the gardens, who used to boast, "Hear 'em, sir, why you're sure to hear 'em. We keeps a nightingale."

My nightingale-catching friend told me that he had been "wheeting" and "curring" since half-past four that morning, and that he could "wheet" and "curr" no more that day. Recollecting at the pause of his song that the chaffinch-catcher had put the song of the chaffinch into words, I asked him if he could do the same for the song of the nightingale. He immediately whistled off the song of the nightingale, and told me that there were two songs. The one was rendered thus

in words : — “ Wheet-wheet—jug-jug-jug—swattee ; “ the other (and it generally followed the preceding), thus :—“ Pipe-pipe-pipe — water-wabble-wabble — swattee ; ” but that the bird in full song generally began with the “ wheet and curr,” and sang off that. He then described how he went to work :—When the nightingales first come over, a regular army of “ catchers ” go out in quest of them. “ It is ten or twelve mile from London before you hears one, and he ain’t there long before he gets catched by somebody. It ain’t always you can get hold on ’em, because if a bird has been once catched, it makes him artful next time. The way I catches ’em is this—I hears a bird a-singing, I puts down the trap, and fastens some nice meal-worms with pins on and about the traps. I then drives the bird towards the place, and he is pretty well sure to see the worms, and go into the trap. I always scratches up a place, and lays the dirt about where I sets the trap ; a bird is pretty nigh sure to go to a place fresh scratched up ” (he is insectivorous, and goes to look for insects in newly-turned-up earth). “ They comes over at the end of March or beginning of April. I caught above *two dozen last spring*, and sold them in London. I gets from one shilling to two shillings for ’em when they first comes ; then they goes down to ninepence, and then to sixpence each. I sold above a dozen, dead, for sixpence each, to the bird-stuffer for stuffing ; the shop

soon gets stocked with them. There's a good many *shoemakers* as catches them. They are a very common-looking bird, but a beautiful singing bird, and there is not a bird of the size can beat them in the note. I means to go out next spring after them; but I think I shall get down a good ways from London for 'em."

I cannot refrain, in conclusion; from mentioning a passage (I was flogged at Winchester for not being able to construe it, so I do not swagger about recollecting the quotation) in one of the Greek plays,* where the poet compares, in the most beautiful words, the solitary mourning, in silence and solitude, of the lone nightingale,

* A lady has been kind enough to send me a Milanese song about the nightingale, of which the following is a translation:—

There once was a king
As wicked as possible,
The Lord changed him
Into a Upoe.
Who passes here?
We are Procne
And Philomela,
Changed into a swallow,
Ah, poor creature!
Into a horrid castle
Philomela was put;
But she opened
Doors and windows,
And flew away
To the woods singing
And a nightingale became.

to a heart-broken mother who, at the dead of the night, when sweet sleep has departed from her weary eyes and sobbing breast, bewails the loss of her dear son, lost to her for ever. The song, the "Jug Jug," of the bird, is supposed to be represented in the soft silky Greek words in which the description is penned by the ancient poet. The idea has struck me whether the nightingales do not go to Greece for the winter, and that the poet might have listened to the song of one of the ancestors of our own sweet songsters.

Nor must I neglect to quote honest Izaak Walton, whose marvellous portrait in the South Kensington Museum has lately so riveted my attention that if I were to meet him in the street to-morrow I should know him again. This is the man who wrote the following :—
 "But the nightingale, another of my airy creatures, breathes such sweet loud music out of her little instrumental throat, that it might make mankind to think miracles are not ceased. He that at midnight, when the very labourer sleeps securely, should hear, as I have very often, the clear airs, the sweet descants, the natural rising and falling, the doubling and redoubling of her voice, might well be lifted above earth, and say, 'Lord, what music hast thou provided for thy saints in heaven when thou affordest bad men such music on earth!'"

A VISIT TO "THE WHITE-HORSE HILL," BERKSHIRE.

I ARRIVED at my friend's hospitable mansion late in the evening in February, 1864, after a long drive over bad roads. It was so dark during the journey that I could see nothing whatever of the country, but, on arrival at the house, I heard the tinkling of a brook, a grateful sound to my ears, as I knew there were trout in it, and that we should be after their eggs* on the morrow.

On looking out of the bedroom window at early morning I saw an apparition which pleased me greatly. The house was built in a valley (I was told by my hostess that it was called "The Manger," but she did not give the reason), and right opposite the window was the far-famed "White-Horse Hill," and the white horse upon it. "I must be off after you at once, old hoss," said I to myself, "and see what I can find out about you for my friends, who doubtless have often seen and wondered at your gigantic proportions as they are

* My errand was to get the eggs of these very trout that I might hatch them artificially; and when the little fish were big enough turn them down into our noble Thames.

whisked on in the Great Western Railway express along the Vale of White Horse."* Almost everybody has read the "Scouring of the White Horse," by T. Hughes, Esq., M.P., and therefore does not need to be told that the horse is not a metal or a stone statue, but simply a rude figure of a horse cut out on the turf on the side of one of the lofty hills which forms part of the range of the Berkshire downs. The horse is situated in a most bleak and exposed position, and is not often favoured with visitors in the winter, though frequent pic-nics take place on the hill during the summer. Passing along the side of my friend's fish-pond, and along the brook, and through the copse, I soon arrived at the spring-head where the water gushes out from the chalk in a perpetual, ever-flowing, never-freezing stream, and as cold as ice itself. Emerging from the wood, I was at once on the downs; and here, for the first time, I was enabled to perceive the gigantic proportions of the horse, though he was still several hundred feet above me. 'Forward' was the word, and a few steps brought me suddenly to the brow of a precipice, which formed one side of an enormous valley, or ravine, so deep and mysterious-looking that I felt a species of awe come over me. This is, with the portion of the plain below, what they call

* Reader, if you want to see the "White Horse," look out for him on the brow of 'the highest hill you can see on the left hand, just before you get to Swindon station on the Great Western.

the White Horse's "manger." The south side of it is nearly smooth, and is covered with grass about a foot high. The other side is a series of frowning bluffs, such as we see in pictures of the American prairies. Both sides of the valley are terraced off in a most curious manner in neat little platforms, a few inches broad, reminding one of the tiers of seats in the ancient Roman amphitheatres. These terraces are said to have been formed by the sheep feeding along the side of the hill, and are known in the down county as "sheep-paths." Though their origin is thus accounted for by the local inhabitants, a stranger is greatly puzzled by their appearance. I doubt if they are not formed by slips of the chalk stratification.

This deep valley has a dark, ancient, mysterious gloom about it, and is, I am convinced, the theatre used by the ghosts of the ancient British and Saxon warriors whose bones are turned up by the ploughmen in the chalk hill just above. In this valley they must meet at midnight at Christmas time; and while the great King Alfred, seated by the White Horse, overlooks them, as he did hundreds of years since—

The chief beholds their chariots from afar,
Their shining arms and coursers trained to war;
Their lances fixed in earth, their steeds around,
Free from the harness, graze the flow'ry ground;
Their love of horses which they had alive,
And care of chariots after death survive.

But what can that object be moving, far, far away at the bottom? I cannot see it now. I certainly saw something move among the long grass; ah! there it is again—a hare—look, there she goes at full speed up the hill-side. She stops and listens; I blow my whistle; she is off again. Ah! poor puss, you may well keep yourself in training. You have probably escaped but yesterday from the greyhounds at Ashdown Park, and you had better be off at once, or my noble friend's harriers will be after you to-morrow. So I shouted "currant jelly" as loud as I could, and poor puss put on the steam, and was soon out of sight.

The ascent becomes steeper; but steps cut in the turf assist one a little, though it is like going up the roof of a house. What a curious-looking gutter this is on the right hand, and how clean it is kept. I wonder what it is. I go further, and perceive that the gutter widens out into a broad ditch, about six yards across, and two feet deep, cut in the turf. I walk along it; but where can the white horse be? I go higher up the hill, and at once perceive that these apparent ditches form the outline of the white horse himself.

It is indeed a most gigantic beast. When near him he is not the least like a horse, but by walking up the white path which forms the back bone, one arrives at the head. On a little consideration its form can be made out; the two ears are triangular places cut out of

the turf like a big flower-bed; the main body of the head is nearly, if not quite as large as one of the Charing-cross fountains, and in the centre is a round patch of white chalk, which forms the eye. The lower jaw is composed of two pathways cut in the turf, so that the white horse's mouth is represented as being open, as though pulling hard at the bit. In order to give some idea of the size of this head, I now give its measurements as I stepped it out. The eye is just four feet across; the off ear is fifteen *yards* in length; from the top of the head to the lower jaw there are twenty yards; from the lower jaw to the base of the off ear eighteen yards. I then proceeded to step out to other portions of the horse, and found that the length of the lower fore-leg is twenty-four yards, and of the hind-leg forty-three yards. The tail of the horse is two yards across, and forty yards long; the lower part of it, in consequence of the drainage of the wet, reminding one much of real hair; the entire length of the body of the horse along the line from the lower jaw to the tip of the tail is *one hundred and thirty yards*; add to this the forty yards for the tail, and we have the total length of the white horse *one hundred and seventy yards*, as near as possible. Reader! mark the space out with sticks on your field, and you will see what a gigantic fellow this white horse is. The whole animal is said to include a space of about two acres, but I have not time to verify this. If

Londoners wish to realise his size, let me tell them that the line from the lower jaw to the end of the tail is *about* the same as the length of the pavement on the top side of Trafalgar square at Charing Cross, opposite the National Gallery.

For many centuries has the White Horse been keeping watch over the country below, and been admired and wondered at by generation after generation of worthy Berkshire men and women; but it is occasionally "scoured," that is, the pathways are cleaned out from the grass which has grown up upon them, and fresh chalk added to make the horse clean and bright, for on a clear day he can be seen sixteen miles off; the last scouring being that described by Tom Hughes, Esq., M.P., in his admirable work the "Scouring of the White Horse." It is at this time that various rustic games are played, and I listened to a long disquisition on the art of playing "back-swording," &c. I learnt all the mysteries of back-swording from Thomas Butler, the old man, who went out to "Idle Tump," an old camp close by, to gather moss for me to pack up my trout eggs with. Thomas informed me that he had both "a-seen it and a-done it many a time on the hill, and that he had generally got the best on it."

Of the origin of the White Horse nothing certain and positive is known; it is, without question, of very great antiquity. The following is, I believe, about the most

authentic account: "In the reign of Ethelred I., the brother and immediate predecessor of Alfred, the Danes invaded Berkshire, and possessed themselves of Reading. There they were attacked by the West Saxons; in the first engagement the Danes were defeated, but in the second they repulsed their assailants. Four days afterwards, at *Æscesdum*, i. e., Ash Tree Hill, a more important battle was fought, in which the Danes were defeated with great slaughter. The white horse is probably a monument of this victory."

It is always with regret and a sigh that I consult books on matters of this kind; how much better is it to gain, first-hand, the local traditions and stories which are sure to abound in the neighbourhood! I was therefore most pleased, in the course of the morning, to meet in the village a poor old woman with a bundle of sticks on her back—for if there is one thing more than another which is a real treat to me it is to have a chat with a venerable old man or woman, rich or poor, a Peer or a Pauper. "Good morning, Mrs.—; good luck with the sticks, I trust."

"Ah! sir, times is 'ard, sir; and the farmers terrible cruel, sir; they won't let a poor auld doman (Berkshire for woman) pick up a few bits of stick just to bile my kettle and cook me a bit of victuals like, sir; and I am a poor old body—seventy-three come this next lambing time; but, thank God, I be pretty hearty for my years."

"Did you ever go up to the white horse, granny?" said I.

"I ain't a-been up there for this five and sixty year, sir; not since I was a young girl, and used to dance along wi' the chaps a-scouring time. Fine goings-on there was then, sir, I can assure you; there ain't times like them now-a-days."

"But who made the white horse, granny?"

"Well, I have 'eard tell in the village, as King Alfred the Great cut en out a time ago on the downs with his sword, when he had a fight agin some foreigners; but I never minds the name on 'em. There's been a deal of battles up by the white horse, sir, and there's a terrible sight of bones about; old pots, great knives, bits of money, and all manners, as they ploughs up in the turmut (turnip) fields—they is the things as was left when there was war up on the hill. I recollects, sir, my father a-taking me, when I was a little girl, up on the hill when war was there, and the soldiers was beautiful, and such 'andsome young men, sir; but I don't mind much on it now. It was only t'other day as there was war again up the hill, and the guns was a-going off all day, and they telled me in the village as how they was shooting deserters. Besides which I s'pose you see the Dragon's Hill, sir. That's where a dragon was killed, sir, a long time ago; his blood ran out on the hill, and no grass would grow on it

afterwards. I don't know what to make on it, sir; but anyhow there ain't a-been no grass on the hill not in my time—but I am a poor old body, sir, and my memory ain't so good as it used to be. Thank ye, sir! Now I'll go and buy myself a bit of tea and sugar, sir, and bless you for your kindness to a poor old doman. I am well one day and bad the next. I ebbs and I flows, sir, that I does; I ebbs and I flows."

I have taken some little trouble to find out what "the deal of war" was that my ancient friend recollected as going on on White-Horse Hill. The first occasion, when she was taken up to see the "beautiful soldiers," must have been the assembly of the Volunteers in 1803, when Buonaparte was expected to land in England; the second "war" must have been the encampment of the Berkshire Volunteers, which took place a short time since, when rifle practice was incessantly going on in "the manger" under the white horse. So, after all, there *is* some foundation for her "terrible sight of battles" having taken place on White-Horse Hill.

The battle with the Danes, I think, must have been fought about A.D. 890 (I write under correction), and I fancy that Ashdown Park, the seat of the Earl of Craven, where the well-known coursing meetings are held, must have taken its name from the site of this ancient victory.

How times are changed! Formerly the Danes were enemies—the invaders of our land—and I fear when

conquered they were cruelly treated by the victors; *now*, a fair Danish lady sets her foot upon the soil; the whole of England rises as one man to welcome her arrival to our shores; what a *whole army* of Danes could not do, namely, conquer England, years ago, one fair daughter of their country has done in 1863. England's brave sons would *never* bow to an invading host, but they will with one accord render due submission and homage to the beauteous Royal Princess, the wife of her Majesty's eldest son, and the mother, we trust, of kings who will rule this land when we are all laid low in the dust. Who, then, can look at this grand White Horse, unaltered by time, by wind, by frost, or by storm, rejoicing in his strength and stern immortality, on the bleak Berkshire downs, without thinking of the present and the past?

Far, far away in the valley below I see *another* white horse, speeding his way with lightning wings; this is the steam horse of the present day—the Great Western locomotive the “Duke of Wellington”—vomiting clouds of steam, and rushing comet-like through space with the morning up-express to London.

This is science, this is progress, this is the work of the present generation. Yet *the* white horse notices it not; as he was years ago so is he now, grand, mysterious, and awful in his hoar antiquity and silent watchings for time and events to come.

LIONS AT THE ZOOLOGICAL GARDENS.

It is strange how that, amidst the high state of civilization to which we, the present inhabitants of the earth, flatter ourselves we have attained, there still lurk here and there relics of the customs of the ancient men, the first pioneers of civilization. One of the most marked customs of our rude, warlike, but yet highly respected forefathers, was the choosing of emblems, whereby not only individuals (witness the helmets and banners of the Knights Templars), but even whole nations, might be distinguished and characterised one from the other. In sacred as well as profane times, we find that animals have been chosen as fit tokens and signs to be emblazoned on the standards of armies when they went forth to war. Thus, when the Tribes of Israel were first separately designated, the Lion was chosen as the standard of Judah.*

* We read, Numbers x. 14:—"In the first place went the standard of the camp of the children of Judah, according to their armies." The other standards of the various tribes, as represented by animals, were Issachar by "a strong Ass, couching between two burthens;" Dan by "a Serpent," Naphtali by "a Hind," Benjamin by "a Wolf."

We have but to look around us even at the present time to find the same idea still prevalent. The Russian double-headed eagle extends its power over vast tracts of the old-world continent; the Austrian eagle has frequent times and often met face to face in deadly combat with the Gallic cock; the eagle of the warlike Romans spread its conquering wings over the downcast walls of the sacred city; but what animal out of the whole creation has England, the favoured country to which we belong, chosen as its representative? Need I mention that the king of beasts, the lord of the forest—the LION—stands forth in all his natural beauty and graceful magnificence as the type of the Englishman and of the English nation?

We have heard of late much of the lion's habits when at home, and travellers do not give him so good a character for courage or for such noble attributes as he is supposed to possess. No man, however, is a hero in his nightcap; and it is not altogether fair to tell stories out of school.

Anyhow, I would venture to observe that, whatever

* In December, 1866, a friend of mine, one of the professors at Glasgow, sent me the following interesting note:—

“The Inspector of the Zoological Gardens at Dresden came to me at the time of the Prussian entry, and asked me to beg the English Ambassador's permission to hoist the English flag over the lions in the gardens, to prevent the Prussians shooting them.”

the Lion may be said in books to want in daring and bravery, he evidently possesses some great and formidable qualities; for were it not so, how is it that travellers are always in such a desperate hurry to get out of his way, and keep such a respectful distance from his majesty's person when he is offended? Then, again, what in nature can be grander than the voice of this "Desert King?" How do hearts, both of man and beast quail, when, camped in the solitude of the wilderness, far away from human aid, the terrific roar of the lion falls upon their affrighted ears amidst the howling of the wind, the crash of the storm, and the peals of heaven's artillery! The Lion is awake, he is hungry; we know not how near he is; we know not who is to be his victim!*

* There is no animal which exhibits greater cunning than the lion in all its doings; generally found in troops, varying in number from three to eight or nine, they exercise great ingenuity in circumventing their prey and in avoiding man—the only enemy they dread.

During the night they travel long distances in search of food, generally returning to their lair by sunrise. They sleep and bask in the sun during the day, resuming their peregrinations at nightfall. Should they have young ones, they are carefully concealed during their absence.

On the large, sandy, and arid plains of South Africa they often experience considerable difficulty in securing their prey. The large herds of game all round are so watchful and wary that they often retire to their dens supperless. They then have recourse to stratagem. One favourite and generally successful

Such a scene as this has been admirably realized by my friend, T. C. Carpendale, Esq., in the drawing I present to my reader. (See Frontispiece, Vol. II.)

The sun is just sinking down at the edge of the wilderness, and a long dark stormy night is at hand; the clouds are rolling up heavy and dark from the horizon. The elands and the antelopes are on the distant plain cropping their evening meal in peace, and lo, from behind the rocks stalks forth a huge dark cat-like figure; silently and lightly as a shadow he moves his giant and ponderous frame—his foot-fall is unheard even by his victims proverbially swift of ear.

At his side are the jackals; the one gazing eagerly at the beasts which he is well aware his friend the lion will soon lay bleeding at his feet; the other thin and famishing, is cracking up a bone long since dried up by

manœuvre, which I have often known them practise, deserves to be mentioned for its ingenuity.

A party will divide, some crouching at small distances from each other, whilst the rest make a detour up the wind. Arrived about a mile above their companions, they commence roaring loudly, charging down wind. Away rush the herds in frantic haste, and, in their alarm, losing their accustomed caution, become an easy prize to the formidable ambushade.

Man they generally avoid, and their haunts are far removed from his habitation; but at night, especially if it is dark or rainy, they are bold and daring, and will frequently spring over the high cattle-fence with which the Kaffir kraals are surrounded, and kill their prey inside.—A. B. in the "Field."

the heat of the sun. They will both soon have an ample supply; only wait awhile, till their master has slain his victim.

The sun disappears—then the Lion's thunder-roar peals along the plain—night comes on.

Darkness He makes the earth to shroud,
While forest beasts securely stray,
The lions roar their wants aloud
To Providence, who sends them prey.

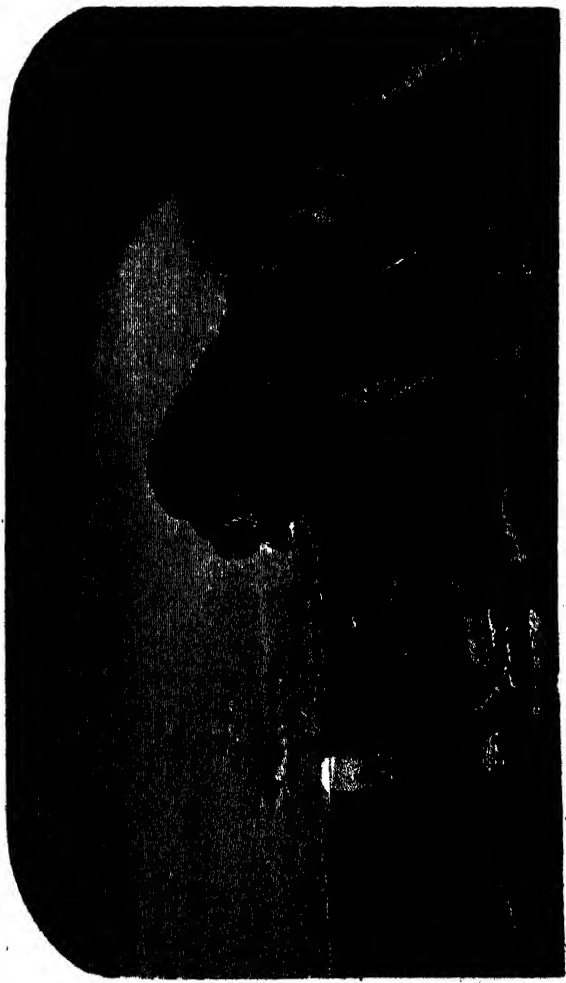
Who can listen to the chanting of the 104th Psalm—that grandest of grand poems on nature's works and power—in Westminster Abbey or St. Paul's Cathedral, without feeling a thrill run through him when the deep bass notes of the organ and the swell of human voices proclaim that

“THE LIONS, ROARING AFTER THEIR PREY, DO SEEK THEIR
MEAT FROM GOD?”

Who, again, can doubt the beauty of the many passages in Holy Writ* where this noble beast is mentioned, or can gaze upon the sculptures of nations long passed away, without feeling that the Lion is indeed a noble beast—next to man himself, perhaps, the most glorious specimen of the handiwork of the Creator?

Shall not we, therefore, feel proud that the Lion is by

* See lions mentioned by Job, in Appendix.



'THE LIONS HOWLING AFTER THEIR PREY DO SEEK THEIR MEAT FROM GOD.'

all and everybody considered as equivalent to the Englishman and the English nation! The Lion has gigantic strength, individually and collectively—so has the Englishman. The Lion is playful and kind in disposition when properly and respectfully treated—so is the Englishman. The Lion loves fair play; he gives notice of his displeasure with a word, and follows it by a blow—so does the Englishman.

The Lion has a good appetite, and his principal and best-loved food is beef. Who can say that the Englishman does not resemble him in this point?

Let us, therefore, for once go and see the Lions at dinner at the Zoological Gardens, even though they are prisoners, poor beasts.*

But we must first go into the kitchen to see the dinner prepared for the Lions. Our old and civil friend William Cocksedge—who has had over thirty years' long and faithful service with the lions, and who really loves his beasts; and, if action mean anything, is beloved by his beasts in turn—shows us the good things he has provided for his pets. The daily rations of the lions are alternately beef and horse; and each beast is

* I hear there is just a possibility of a large space being enclosed at the gardens, with strong iron palisading, so as to form one gigantic cage, in which rocks, &c., will be placed; forming, in fact, a gigantic "den" for the lions. What a treat it will be to see the noble creatures in comparative freedom, and bounding about with the graceful movements peculiar to the cat tribe!

allowed from eight to twelve pounds of meat, weighed with the bone.* The "lordly dish" in which the dinner is brought is a wheelbarrow kept sweet and clean; the knives and forks are provided by the lions themselves in the shape of sharp teeth and claws; and the dinner is "served" on an instrument well suited to the purpose. Cocksedge also, from time to time, provides condiments with the meat; for upon it he occasionally sprinkles a proper allowance of common flower of brimstone, or sulphur, as this keeps the animals in good health and condition, upon the principle of occasionally giving our own youngsters a treat of brimstone-and-treacle by way of a change.†

It has been aptly remarked that the nearest way to the heart is down the mouth, and this maxim holds good as well with beast as with man; besides this, it is wonderful how the human and the brute memory, though oblivious of other matters, *never* forgets the dinner hour. There is a story of a cavalry officer, who, when examined by the commanding officer as to the meaning

* A lion costs, Mr. Bartlett informs me, about 3*s.* per diem for his food. Rather expensive pets, are lions, when there are many of them.

† Some few years since, the lions and other carnivora at the Zoological Gardens were seized with an epidemic, which threatened to destroy them all. This terrible calamity was, however, averted by Mr. Bartlett's giving them chlorate of potass, a medicine both he and I recommended for the Rinderpest, or cattle disease. See my letter in "The Times," Oct. 19, 1865.

of the various trumpet calls, confessed, after many bad shots as to their signification, that he really only knew but two, and they were—"dismiss" and "dinner." So, too, the lions know well their dinner call, which is simply the rumbling of the wheelbarrow over the stone pavement in front of their dens. It is most curious to witness how well the poor brutes know this welcome sound. The big leopard sits up on his haunches, and makes a sort of half-yawn, half-laugh, showing his pink lips, his rough tongue, and his ivory teeth, as much as to say, "Well, *I* am ready at all events."

The tigers, Bill and Bess, jump one over the other at a game of leap-frog, as though they were perfectly indifferent as to what was going on. As we ourselves when waiting for dinner, have but one thought (and that is, "How soon will dinner be ready?" but do not care to show that this thought is uppermost in our minds), so do the hungry carnivora attempt to while away their time in feline conversations about the weather, and looking over sawdust albums.

Then, again, look at the old Lion—a hearty old fellow strong, powerful, in good health; his noble eye gleaming with pleasure; his mane—long, glossy, thick—is all bristled up; his tail lashes quickly and eagerly from side to side. Of course he is not hungry; oh, dear, no! but yet why does he pace up and down in front of the bars of his cage like a sentry on a cold frosty night?

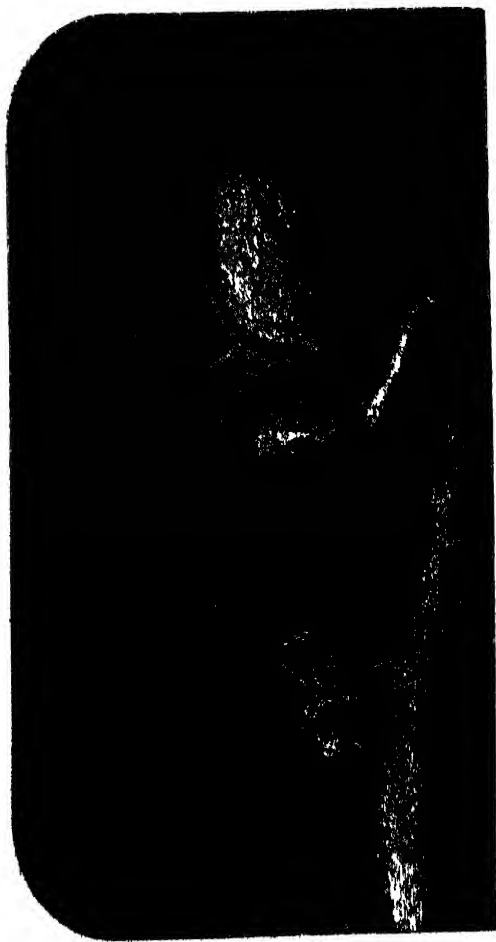
And why does he perpetually sweep his magnificent mane against the bars, reminding us of the marble lion in the statue of Andromeda and the lion? And why does he attempt impossibilities, by doing his best to peer round the 'corner to look for his dear friends Cocksedge and the wheelbarrow? They at last appear in company, and then look at the games all the hungry creatures begin. The lions Jane and Jack dance the sailor's hornpipe, accompanying themselves with their own elegant music. The jaguar skuttles round and round his den, and the hyæna plays the bagpipe for the lot. Then comes Cocksedge; he gives a bit of meat to the jaguar.

"Here you are, you saucy old hussy; give us your paw for it; well, you want a bigger bit, do you?" Pussy purrs assent. "Here's a good pennyworth; then you can eat the rest by-and-by for your supper. Don't be greedy now, my pet."

What a treat it is to see how these wondrous carnivora clutch their meat through the lower bar of the den! How proudly they retire with it to the rear of the den, and how some of them seem really to enjoy it! Let us wish them "*bon appétit*."

Alas! alas! but a short time after I saw the old lion so thoroughly enjoying his dinner, Mr. Bartlett kindly sent me word that the old patriarch had died very

THE MONARCH LYING IN 'S AIR



suddenly, and at the same time he invited me to be present at the dissection.

It appeared that the lion was quite well on Saturday night, and ate his food heartily as usual; but when the keeper came on Sunday morning, behold, the poor beast was extended full length, dead and stiff upon the straw of his bed, having apparently died without a struggle. Alas! poor Lion!

The able pencil of Mr. T. C. Carpendale enables me to partially represent the grand and really magnificent appearance of THE MONARCH OF THE DESERT LYING IN STATE. The artist has endeavoured to give the idea of a very old lion, who has lived his full term of years free and unmolested in his native desert. But the "grey hair came upon him!" his teeth and his claws became unequal to their work, and he could no longer provide himself with food. He wanders along the sandy wilderness, till, faint and exhausted, his strength will carry him no further. He stumbles against a rock, and falls to rise no more. (See Plate.)

But Mr. Carpendale shall describe his drawing in his own words:—

THE LION'S TOMB.

Pale twilight, deep'ning, sheds a sober gloom,
And dimly lights the lion's lonely tomb;
Th' awakened plunderers of earth and air
Around the dying chieftain's couch repair;

While, high in air, with dark and shadowy wing,
Behold th' expectant vulture hovering !
Mark how she lingers in the starry sky,
And tunes her plaintive, funeral song on high !
Near, and more near, athwart the fading light,
She screams terrific to the peaceful night,
Chanting her farewell sonnet to the sun—
Sad emblem that his mighty race is run.

In admiring the marvellous beauty of the Lion, whether we regard him under his royal title as "King of Beasts," or whether as a dead animal before us for anatomical examination, we cannot but be struck with many parts of his bodily economy which the occasion of his death enables us to inspect without personal danger. I will therefore, with the reader's permission, give some details of the wondrous anatomy of the Lion, as it is not often that the opportunity offers of examining such a fine specimen as that which died in the Gardens, in December 1860.

Having hauled, with difficulty, the huge carcase of our Lion upon a table in the Society's dissecting-room, in company with a few medical friends at the Gardens, we carefully searched for the cause of his death, and the verdict was, "Died from congestion of the lungs, caused probably by the excessive cold."

Our defunct friend had been in the Gardens about twelve years, and when he arrived was a cub so small as to be easily lifted by a man into his den. He was a famous roarer, and those who lived near the Gardens

must frequently have heard his thunder-like voice at sunrise and sundown. His height at the shoulder was about 4 feet; length of the body, 5 feet 8 inches; of the tail, 3 feet 5 inches; altogether a very large and powerful animal.

There is very much to be admired in this gigantic representative of the cattribe; in it we find monstrous strength combined with great activity and elegance of form, amounting to positive beauty. Again, we see how admirably each organ is suited to co-operate with its neighbour; how the padded feet correspond with the nocturnal eye, how the scissor-like teeth are adapted to work with the pointed claws, and how the whole muscular system, closely locked and knitted to the bones, wields with ease the formidable destructive weapons with which it has been endowed.

The first thing that struck me, on looking at the dead animal, was the massive and herculean fore-arm — a compound of the hardest muscles and wire-like tendons: a measure told us that the circumference of this powerful limb was no less than 1 foot 7 inches, or nearly the size of an ordinary hat. Then the gigantic foot arrested the attention, for it measured, at the lower surface, $6\frac{1}{2}$ inches, and when outspread, 8 inches.

A delicate, soft, harmless-looking foot is this, with a beautiful fringe of fur round the edge; but what do we see under this fur? Snugly concealed, like riflemen in

ambush, are those dread claws, which, when extended, and intent on blood, will tear furrows an inch or more deep in the thick skin of a buffalo or giraffe, or hold the powerful eland with a vice-like and deadly grasp. Then, again, remark the soft, velvet-like pads which fill up the hollow of the foot (the largest pad being 4 inches broad). Has human ingenuity ever contrived, or will it ever contrive, any such elastic, firm, yet noiseless material, which shall enable the wearer to steal up with a ghost-like motion upon the unsuspecting prey, be he ever so wide awake? We strip the skin from the foot, exposing the tendons (or leaders), which, though beautifully white and rounded, possess the strength of the twisted iron-wire rigging of a ship, and work with the ease of a greased rope in a well-worn pulley. We admire their excessive complexity, yet their admirable arrangement; and tracing them up to the actual claws, or talons, perceive how marvellous, yet simple, is the arrangement by which these formidable and lethal weapons are, without effort on the owner's part, made to retract into a secure place of protection, and their sharp points to be sheathed like a dagger in its scabbard. Doubtless the inventor of the india-rubber spring, which spontaneously closes the door of our dwelling-room, thought he had made a great discovery; but he is probably not aware that in the lion's foot he may find the pattern of his invention registered by nature herself

Protruding from the lion's lip, on either side, we observe a formidable display of whiskers, which in our own species are generally more for ornament than for use (except as Lady-catchers). In our friend the lion, on the contrary, we find that nature makes them serve a beneficial purpose, for they act as feelers, and those, too, endowed with great sensibility. When it is too dark to see, the lion feels his way through the underwood by means of his whiskers, and pounces upon his prey. How is this done? We trace one of the whiskers to its root, and find that it terminates in a mass of highly-sensitive nervous substance, which forms an oblong bulb, as large as an apple pip; each hair has its own bulb, and these whiskers are therefore so many watchful sentries which take their posts on dark stormy nights, when the regular duty-men (the eyes) are unable to keep watch and guard. The same arrangement holds in our domestic puss. Should you doubt this, pull puss's whiskers sharply and mark the result.

The Lion is gradually crawling up to seize his unsuspecting prey, and his eyes are fully occupied in watching their movements. He has, therefore, not much attention to spare for other things. He is, however, enabled to glide through the underwood and among the rocks by means of his outspread whiskers, which, just touching the obstructions, telegraph silently

to his brain, "keep to the right, keep to the left, ground free," &c.

The seal too has these whiskers with their sensitive nervous bulbs. In this case the idea is the same, viz., to enable the seal to give his whole attention to the fish he is pursuing, while the whiskers prevent him from running foul of the rocks among which the hunt is going on. I hope some day to write an article on these sensitive whiskers as developed in nocturnal and diurnal animals. The subject is full of interest, and has never yet been thoroughly investigated.*

The ox and the giraffe have long flexible *prehensile* tongues, by means of which the animal is enabled either to cut the short grass of the field, or pull off the leaves from the lofty palm-trees. Not so the lion—the dread slayer of the herbivorous races—his tongue is by no means smooth or prehensile, but, on the contrary, broad, thick, and rasping. The papillæ, or elevated spots, which in most animals are soft and velvet-like, in the lion are converted into prominent and sharp horny excrescences. In the fresh state the tongue feels rough to the hand, but as it is dried the roughness becomes more perceptible, till at last we have a surface more like that of a farrier's new file than of a tongue. In the dry tongue of the lion now before me, the horny spines at the top of the tongue are no less than one-sixteenth of an inch

* See Appendix: Whiskers on Nose of the Horse.

in length ; they gradually get smaller towards the root of the tongue, where they are set in oblique rows like the teeth on a file. Now this rough tongue is of great use to the beast, for having struck down his prey with his sledge-hammer claws, and gnawed by mouthfuls the flesh from the bones, he finishes his dinner by scraping at the bone with his tongue, and literally rasping every remaining portion of meat from off it in a more perfect way than does even the butcher from the marrow-bones he sends out to his customers. Domestic puss has this rough tongue as well as the lion. It may be well seen when she is lapping her matutinal milk, or picking at the rejected chicken-bone. Young observers should get a cat's tongue, cut off all the meat with a pair of scissors, and dry the rough skin; the spines will be then well seen.

I must not forget, talking of horny spines, to mention the much-disputed story of the "claw at the tip of the Lion's tail." The first thing I did was, of course, when at the lion's post mortem, to examine if any such claw, or anything approaching to a claw, existed concealed on the tail of our specimen ; but my search, as I expected, was not successful. . This story of the claw on the tip of the lion's tail has by many been thought to be an untruth and a myth ; but there is foundation for the fact. It was observed by the ancients, for the lions represented on the Assyrian marbles have claws

at the end of their tails. Pliny describes the lion as "lashing himself into a rage by means of his own spur."

Homer also is said to have mentioned it.* It remained

* I have had great difficulty in finding the passage where Homer is said to describe the claw on the tip of the lion's tail. The nearest we can get to it is the following, as kindly hunted up by my friend C. W. Standidge, Esq. After all, Homer does not mention the claw; he was too good an observer for that:—

"Dear Buckland,

"Here's your lion.—*Iliad* γ' or XX, lines 170, 171.

Οὐρῇ δὲ πλευρὰς τε καὶ ἰσχία ἀμφοτέρωθεν
Μαστίεται, ἔε δ' αὐτὸν ἐποτρύνει μαχέσασθαι.

"Literally translated.

"He lashes his sides and thighs on both sides with his tail, and excites himself to battle.

"Pope-ically translated.

"He grins, he foams, he rolls his eyes around,
Lashed by his tail his heaving sides resound.
He calls up all his rage, he grinds his teeth,
Resolved on vengeance or resolved on death.

"Nothing about his special claw.

"C. W. STANDIDGE."

My friend, the Rev. Charles Wolley of Eton College, also wrote to me as follows:—

"I have found both the passages to which you refer. The first is Pliny, N. H. viii. 19. *Ejus (iracundiæ) in principio ter et verberatur (caudâ); incremento terga, ceu quodam incitamento, flagellantur*; i.e., as his rage increases, his back is lashed with it, as if it were an instrument to excite (his anger).

"This is the strict sense of the passage; and 'incitamentum,' though capable of being translated 'spur,' if the context points to this sense, does not usually mean 'a spur,' which is 'stimulus,' or 'calcar.' It is hardly fair to ignore the 'ceu' as you do.

therefore a sort of open question till the time of Blumenbach, who described the prickles as "small and dark-coloured, hard as horn, and placed in the very tip of the lion's tail, surrounded at its base by an annular fold of the skin."

The subject was in our own day taken up again by Mr. Woods; for in the "Proceedings of the Zoological

"The passage in Homer is in Iliad γ'. (XX.) 170. It is literally translated :

"And with his tail he lashes his sides and loins on both sides, and *drives* himself *on* to fight."

"ἐποτρύνει, 'drives on,' might well be translated 'spurs on,' but this would convey an incorrect idea of the expression, as far as Homer is concerned, as he never makes any allusion to riding on horseback, except in describing the performance of a mountebank.

"The metaphor is either from driving the war-chariots to battle, or from the practice of the officers in Oriental nations *flogging* their men on to the attack, as circumstantially described by Herodotus in his account of the battle of Thermopylæ. I think in both the passages the idea intended to be conveyed is, that the tail is used as a 'whip' rather than a 'spur.'

"The lines in Homer are thus translated by Lord Derby:—

"And with his tail he lashes both his flanks
And sides, as though to rouse his utmost rage."
(Vol. ii. p. 363, line 197.)

"All Pliny says about lions is very interesting, though not trustworthy. You observe that he was aware of the fact of their taking to man-eating in their old age, when they could not catch antelopes.

"Yours very truly,

"CHARLES WOLLEY.

"Frank Buckland, Esq."

THE TIP OF THE LIONS TAIL.

Society," September 11th, 1832, we find it recorded that a specimen *was exhibited* of a claw obtained from the tip of the tail of a young lion from Barbary; it was first seen on the living animal by Mr. G. Bennett, who pointed it out to the keeper; they secured the beast, and while handling the claw it came right off, and was brought under the notice of the Society. "It was formed of corneous matter, like an ordinary nail, being solid throughout the greater part of its length; towards the apex it is sharp; at the other extremity it is hollow, and a little expanded; it is flattened throughout its entire length, which does not amount to quite three-eighths of an inch. Its colour is that of horn, but becomes darker, nearly to blackness, at the tip. Its presence or absence does not depend upon size, as the lions in Paris on which it was found were of considerable size, while that belonging to the Society, from which the present specimen was taken, is small and young; nor upon sex, for although it is wanting in the female in London, it existed in the lioness at Paris."

Mr. Woods had previously examined the tails of all the stuffed skins he had access to, and found it only in an adult Asiatic leopard. He remarks, "that it is difficult to conjecture for what purpose these minute claws are developed in so strange a situation, that of stimulating the animals to anger being out of the question. It is at least evident from their smallness, their variable

form, and their complete envelopment in the fur, and especially from the readiness with which they are detached, that they can fill no very important design." My own opinion is that this claw is no more than a bit of the ordinary scarf skin of the tail, which, being confined to its place by the dense hairs which form the tuft at the end of the tail, is prevented from falling out of its place, and in time it becomes hard and horn-like. Any information on this subject I shall thankfully receive.*

I have more to say of the anatomy of the Lion, but would rather turn attention to lions of another kind. Englishmen have for ages past, even before the days of the lions at the Tower of London,† been fond of the beast they have chosen as their emblem. They are, moreover, plentiful enough—if not alive, yet in pictorial representations, all over England; for there is hardly an English town or village that has not a lion—black, white, red, or blue (any colour, of course, but the right—tawny)—hotel or public-house in it. In fact there is

* The author of an admirable paper about lions, thus writes with respect to the claw at the tip of the lion-tail:—

"I have examined many, and have found in some a small horny tip, though I cannot imagine to what purpose it is applied."

† I cannot help thinking that the expression we so commonly use now, "Going to see the lions," began when people used to visit these animals at the Tower.

a story told of a lawyer who told his clerk to take an unwelcome visitor out round the town to see the lions; and after their journey they both returned in a state of intoxication, the clerk having taken the visitor literally to see "the Lions," and, of course, when they arrived there, they were obliged to try the taps under their jurisdiction. There were so many lions to be visited that the interviews they had had with them had disturbed their equanimity.

There is a famous Lion on the top of Northumberland House at Charing Cross—the same beast that wags his tail across the full moon on the first day of April in each year—and I understand that large sums of money have been lost and won on the wager as to which way this Lion's head was turned; i.e., whether the Lion looked towards the City or the West End. A party of officers were assembled in a regimental mess-room in Dublin, when the subject was started, and many bets were made both ways as to the position of the Lion. A certain officer had betted heavily that he looked towards the City, and when he went to bed he sent for his black valet. "Which way," said he, "does the Lion on Northumberland House look?"

The nigger scratched his head. "Ah! massa," said he, "he look straight direct towards de Bank of England; 'cos why, his money all dere. When I was wid you at de Morley's Hotel, de first ting I see

in de morning was de great big Lion ; he stare right into my face."

"Enough!" thought the gentleman. He immediately went down stairs again, and doubled his bets that the Lion looked towards the City.

The next morning, when Sambo came in with the hot water, he said, "Gorra, massa, me tink me made mistake last night; me tink de Lion hab turned himself and look de oder way."

"You scoundrel!" said the master; "be off to London instantly by the express, and telegraph to me the moment you arrive which way the Lion really does look."

Report tells us that no telegraph message ever arrived, and that the nigger has never been heard of since.

Which way then is this Northumberland House Lion placed—does he look towards the City or towards the West End? Reader, solve the question for yourself, recollecting always that there is an excellent reason for his position, for no British Lion—be he biped or quadruped—ever turns his back on her Most Gracious Majesty the Queen.*

* There is, however, one exception to the rule: when engaged in his duties of driving, Her Majesty's Coachman turns his back upon the Sovereign.

WILD BEAST SHOWS.

LIONS.

THE grand but startling roar of a Lion thundering down the avenues of the Long Walk at Windsor, one dark November evening,* gave notice to the staid citizens that the African Lion had come to pay a visit to the stronghold of his British relative. The next day's sun dawned upon an eruption of yellow vans, which had sprung up amidst the nettles, weeds, and brickbats (the crop of that industrious farmer "Chancery"). I lost no time in paying a visit to the Lion which I had heard roar the night before, and which I found in the erratic zoological gardens, under the management of Edmonds, late Wombwell. Nearly half a century ago, Mr. Wombwell started the idea of travelling menageries, and ever since, like the Wandering Jew, his caravans have been on the march from town to town, from fair to fair.

* I was at this time, November 1858, quartered at Windsor with my regiment, the 2nd Life-Guards, of which I was at that time Assistant-Surgeon.

The establishment, then at Windsor, consisted of fifteen vans, in which the dens are built. When they arrive on the exhibiting ground they are formed into two lines, with the long elephant van at one end and the "pay here" van at the other, the whole being roofed over with canvass. Between thirty and forty men are employed as keepers, &c., and forty-five horses are attached to the establishment to drag the vans; many of the keepers have "apartments" in the vans, behind the animals—one man having for his next plank neighbour the hyæna; another the bear, who "rattles his chain all night;" another the lioness and her cubs, which latter cry as loud and as continuously as biped babies, &c. The expenses, as may be imagined, for food for the animals, &c., are heavy, and amount, as I was assured, to nearly thirty pounds a day: and yet the exhibition pays a fair profit.

All the animals are carried in the vans, except the two elephants, Akbar Khan (the male), aged six, and Abdalla (the female), aged ten; these intelligent beasts walk, but yet in such a manner that they shall not exhibit their huge carcasses for nothing. Accordingly a van twenty-seven feet long is provided, the bottom of which comes out, and the elephants march away famously, their huge feet only being exposed to the public; this acts as an advertisement, and makes the folks anxious to see the rest of their bodies. They

can march twenty miles a day, but ten miles is about their usual day's journey. These elephants are wonderful performers, and after much time, trouble (and, I am glad to say, kindness), Abdalla has been made to learn to stand on her head—positively on her head—the point where she touches the ground being the spot just where the trunk is attached to the skull, her hind feet being raised about three or four feet from the ground. She will also rear upright on her hind legs, and place her fore feet on her trainer's shoulders; but she remains in this position only for an instant, her weight being so great. The two elephants also stand upon tubs a little larger than buckets, balancing themselves on two feet, and it is quite wonderful to see how neatly and carefully these great brutes dispose of their cumbrous feet, so as to poise their unwieldy bodies.

I was informed that in order to teach these elephants their performances, "it is only necessary to *give them the idea* of what they want them to do, and that they will *practise* what is taught them when alone." When not performing they stand importunate beggars, thrusting their long trunks among the spectators for halfpence, which they immediately spend at a cake and nut stall within reach; they place their money on the stall, and receive the eatables in return. I doubt much whether they can distinguish between a halfpenny or a penny, for in most instances they made

very bad bargains with their coppers, getting small halfpenny or penny worths either. When not served immediately, they ring a bell to call the attention of the black man who keeps the stall, and let him know they wish to make a purchase.

These elephants are worth from 600*l.* to 800*l.* each, according to the market, whether "there were many elephants in the country or not." I saw a small elephant the other day at Mr. Jamrach's, in Ratcliff Highway, about as big as an Alderney cow, the price of which was 500*l.* It is now sold to the Zoological Gardens at Turin.*

Mr. Edmonds had a very fine one-horned rhinoceros,

* My friend H. P. Le Mesurier, Esq., of Mahabad, lately received the following:—

"Some time since you wrote me about elephants. If you are still in want of some I can procure them for you on very reasonable terms. I think the prices of newly-caught elephants run from 600*rs.* to 2,000*rs.*, according to their size and sex. Males are dearest. There is also a young rhinoceros for sale here at 350*rs.*, if you should want it.—W. MILLETT (Tetellee Gooree, Dibroo Ghur, Upper Assam, April 25th, 1866)."

In January 1867, when paying a visit to Jamrach, I saw two skulls of Indian rhinoceros in his shop. These two skulls were the only result of a speculation on the part of my poor friend. He sent his son to India on purpose to get them. Having purchased them up the country, Jamrach Junior drove them some 200 miles down to the seaport—I believe Calcutta. He managed this task by tying ropes on to the animals, and with the aid of some forty coolies, literally "conducted" them to their destination. Food for 120 days was shipped for the poor

which has been in the show twenty-one years, and which cost 1400*l.* at the sale of the animals at the Manchester Zoological Gardens: he always rides in his van, being a valuable animal and worth his carriage. Formerly they had a giraffe, but it died; and in its place they have four "war camels from the Crimea." These form part of the triumphal procession when it enters a town. Two of these camels are walked round and round inside the show, and people allowed to ride, three or four at a time. I had a ride too myself, but found it most difficult to keep my seat: I can compare the motion, especially when trotting, to nothing except what I imagine would be the sensation of riding on the end of a long scaffold pole, projecting from the tail of a cart.

I have since heard of a gentleman who was thrown off a camel in Egypt, and so seriously injured that he died of the accident. The Bedouins never make the camel kneel in order to mount, but either cause the animal to drop his neck in order to receive their foot, and thus get hoisted up, or else they climb up from behind.

animals on board the "Persian Empire," but the voyage being protracted to an unusual length, both the specimens of rhinoceros, which Jamrach valued at 1,600*l.*, died of starvation. The poor things were reduced to such extremities that they ate sawdust and gnawed great holes in a spare mast. They died between St. Helena and England, and the doctor of the ship and young Jamrach preserved their skulls and hides.

Mr. Edmonds has a very fine collection of lions, both Asiatic and African, most of them young. He has also a magnificent lion and lioness with cubs, which were born at Southampton. Outside the show is a very excellent portrait of the big lion, painted on a panel. With this not even Mr. Ruskin, I think, could find a fault—that is, if the perfection of painting is the faithful representation of nature. Inside the caravan one sees the “Lion-slayer,” who goes into the den with seven or eight of the young lions, and makes them jump over sticks, through hoops, and perform other feats of activity. I was informed that it is “much easier to train a ‘forest-caught lion’ than an ‘exhibition lion’”—a fact which is very curious, and much surprised me, but a practically-ascertained fact for all that. The “Lion-slayer” uses a mixture of kindness with severity (the former predominating) in training his animals—handling and the voice doing much; the animals did not show in their countenances the least fear of their tamer, which they would have done if unkindly used.

It is a remarkable fact that lions in travelling menageries are generally in a much better state of health than those which spend their lives in stationary cages, such as at the Zoological Gardens. A very extraordinary malformation or defect has frequently occurred among the lions born during the last twenty years in the Gardens. This imperfection consists in the roof of

the mouth being open—the palatal bones do not meet; the animal is, therefore, unable to suck, and consequently dies. This abnormal condition has not been confined to the young of any one pair of lions; but many lions that have been in the Gardens, and not in any way related to each other, have from time to time produced these malformed young, the cause of which has hitherto never been explained.

The cubs, I understand, born in travelling menageries are not so much subject to this infantile deformity. Lions, dead or alive, are always valuable. All museums take lions, some the skin, some the skeleton, some the viscera. He is a good typical beast. When dead a lion is worth from 2*l.* to 20*l.* A live lion is worth from 50*l.* to 350*l.* for a full-grown fine beast. Sometimes the market is glutted with lions.* They mostly come from Algeria, the lion hunters shoot the parents, and send the cubs over *viâ* Marseilles.

* This was the case during the war between Austria and Prussia. Lions were then very cheap.

PERFORMING LIONS.

IN January 1861, the London streets were placarded with large diagrams, representing the "Lion Conqueror with his trained group of Performing Lions." They were on exhibition at Astley's Theatre, and of course I at once paid them a visit. Many of my readers recollect Van Amburgh and his cageful of lions, but I think Mr. Crockett and his magnificent beasts was a far better performance.

Whereas in olden days coercion and force seemed to be the order of the day, we now see that these powerful representatives of the cat tribe are amenable to kind treatment and firmness; the days of hot pokers and carters' whips are passed, and a common jockey's riding-whip is the magic wand by means of which the lords of the forest are subjected to the will of a man whose physical strength to theirs is as that of a mouse when in the clutches of our domestic puss.

I hear that the old-fashioned way of causing lions and other wild beasts to have a wholesome dread of a hot poker was to allow the animal to burn himself

once with a red-hot poker. The lion-tamer then covered the end of a stick with red sealing-wax, and this the animals carefully avoided, thinking it was a red-hot poker.

Of course, without some little story, Crockett's performing lions could not be effectively brought on the stage. When I came into the theatre, there was a beautiful young lady on the stage, in great distress at being lost in a desert. To add to her alarm, the lions were heard roaring in the distance; at that moment the "Lion Tamer" appears from one side of the stage, and from the other a very fine, black-maned African lion, free and unchained, bounds out with those beautiful elastic springs so peculiar to his race. For a moment we doubt what is going to happen; when the ungallant lion, disregarding the beautiful princess, raises his huge body up into the air, and falls upon the neck of his master, whose head he considerably overtops when standing on his hind legs. In this seeming affectionate embrace the two—the lion and the man—walk round the stage, giving time for the princess to run for it. The Lion Tamer all this time (I observe through an opera glass) has a firm hold on his pet by means of a strong collar round the neck and under the head of the mane, so that the beast cannot well get loose if he tries. The lion's face on his master's shoulder is most absurd and comical; it is like that of an enormous cat in doubt

whether to be angry or pleased; but the weight of the beast must be tremendous, for Crockett has enough to do to hold him up, and he seems right glad when the curtain begins to fall, and he can let the lion down in his natural position.

Then comes more of the story, in which one "Rung Jung," a comical, half-witted character, is caught, and told with solemnity that he shall be devoured "in the den of famished lions," upon which the unfortunate excuses himself, "as he is all skin and bone, and the lions will not enjoy him," and begs "time to get fat."

The next scene is the lions' home in the desert; and when the curtain draws up we see the lion asleep on a bank, his master by his side. The "terrible" effect is rather taken off from this scene when we see the poor, good-natured lion, blinking, with half-closed eyes, at the glaring footlights, and trying to stare at the people beyond, the tip of his tail all the time just moving gently up and down, like that of the cat when warming herself before the fire.

The climax comes when the Rajah commands his rival to be cast into the den, when a substitute, in the person of Mr. Crockett, the Lion Tamer, fortunately appears. His offer to sacrifice himself for "Rung Jung's" benefit being accepted, he opens a door at the top* of the cage, and pops into a good-sized den, containing three lions and a lioness.

The moment he was in the den, I could see the tempers of the animals. There was the old black-maned African lion, the tamest of the lot, and the best performer too. Next, a lion nearly his size, an easy-going beast of the same species. Thirdly, an Asiatic lion, the fool of the party, not over-good-tempered, who does not half relish being tamed. Lastly, the lioness, a regular savage vixen, who retired with open jaws and snarling lips into a corner, and swore and spat at the Lion Tamer whenever she had a chance. With a small hand-whip, the master makes his beasts (even the lioness) perform sundry tricks, which must have cost him much time and patience to teach, and, I should imagine, have placed him often in great danger; for woe be to him if the lions should agree to get up a family quarrel, and make a party against him. I saw him put his head and face into the lion's gaping mouth, which nearly concealed it in its enormous abyss: a feat which must require great confidence, not only in the temper of the lion operated on, but in the other animals also, for the attention of the master is for a moment withdrawn from them. Altogether, Mr. Crockett achieved a great triumph over his three lions and his lioness; his feats were gone through without unnecessary parade and show, and he has taught us what kindness and firmness will do with these magnificent, but at times dangerous animals.*

* I am sorry to say that since this was penned poor Crockett

A few days after my visit as above described, a sad accident happened with these very lions, and in this very theatre.

In the grey of the morning of January 14, an unfortunate stable-helper, ordinarily known by the name of "Jarvey," went through a wicket-gate into the theatre to perform his duties of raking the sawdust of the arena of the theatre. A few minutes after he had been in the theatre, a man in the stable close by heard a terribly cry, and some one exclaimed that "a lion had got Jarvey." He wisely sent off for Mr. Crockett at once. On his arrival in a few minutes Crockett seized a two-pronged fork, and went into the theatre, through the wicket-gate, and there he saw that his lions were not in their cage, but loose. Two lions were on the stage free as the day, and playing with the garlands left by an actress; the big lioness was up in the Queen's box, with her paws on the front of it, gazing out as proudly as possible; and near the stable-door, and about six feet from the gates, lay the man "Jarvey," the lion sitting over him, as a dog sits over a bone.

Seeing this, Mr. Crockett advanced boldly up to this murderous lion, and struck him a tremendous blow over the head near the nose, at the same time rating him

has died. I know not the cause of his death, except that it was in no way connected with his lions; nor do I know what has become of his valuable collection of trained lions.

most severely. The lion sneaked off at once; Crockett then boldly rushed after the lioness and the other lion, threatening them with his pitchfork, and abusing them most vehemently. The brutes, knowing their master and fearing him, at once sneaked back to their cage, and jumping in, lay down looking as though they knew they had done wrong. Crockett shut the door fast and returned to the assistance of poor "Jarvey." In spite of all that the best medical attendance and care could do, the poor man died soon afterwards. The lions' fearful attack had been too much for him.

The reader might like to know how the lions got out of their cage. Crockett at the inquest stated that he was quite certain that he had locked the cage-door quite securely the previous night—that one of the panels which inclosed the iron cage had somehow got loose, and hung loose in front of the cage; one or more of the lions had then probably put out his paw and seized a bit of cloth lying on the top of a cage close by, in which a sick lion was confined; and in pulling it through the bars of the door with their talons so as to get it into their cage, they must have broken the door down altogether by pulling it inwards.

The door had been fastened with two shot bolts and two spring bolts, but a large portion of the side of the cage was torn in, and the piece of cloth was found in the cage. The lions, he thought, had wrenched the

door by pulling it inwards, and had made their escape when it was opened.

Upon hearing of the above accident, I immediately went down to the scene of the catastrophe, and by the kindness of Mr. Miskin, of York Road, Lambeth, the surgeon who gave evidence at the inquest, I was enabled personally to make the *post mortem* examination of the man who was killed, and with him to record the notes which appeared in the papers.

It will probably interest the reader, to read some remarks on the nature of the wounds, and on the probable way, judging from these wounds, in which the lion seized the man. The first thing observable on the body were a number of wounds (no less than twenty-seven in number) about the *left* side of the neck, whereas there were only eight on the *right* side. These wounds were peculiar in shape, tapering towards the two ends, and broad in the middle, indicating that they had been produced by a tearing, but yet cutting instrument. They were cat-scratches, in fact, only highly magnified. One of the claws had penetrated the ear, and had nearly torn it from the skull. The direction of these scratches was downwards and backwards, indicating that the animal had seized hold of his victim from behind, and pulled him down. I account for there being so many more wounds on the left than on the right side by assuming that the lion (as is its habit) cuffed him

first on the right side and caught and held him on the left, just as we see a kitten playing with a ball of worsted. It is also probable that the lion bit his victim at least once in the neck, for a portion of one of the vertebræ of the neck was found slightly chipped, as if by the tip of the beast's tooth, causing mischief to the actual spinal cord within the bone.

Besides these wounds on the neck, several cuts of an extensive kind were discovered on the head among the hair; these also resembled magnified scratches more than clean-cut wounds, or teeth-marks. These wounds were indicative of more serious damage to the structure of the brain below, and accordingly we found much blood effused on the surface of the brain—the result of a blow, that blow being the “pat” of the lion's paw.

Now “pat” indicates rather a delicate strike than a sledge-hammer knock; but be it remembered that the three most powerful things in the animal kingdom are said to be—

Firstly, the stroke of a whale's tail;

Secondly, the kick of a giraffe;

And thirdly, the “pat” of a lion's paw. As the forearm of the lion which died at the Zoological Gardens was more than 19 inches in circumference, conceive the striking power enclosed within this space, and that, too, worked by the largely-developed muscles about the shoulder.

A pat with this formidable weapon is positively a fearful blow; the Nasmyth's steam-hammer, working with elegant ease, will strike a blow which the spectator would hardly expect without seeing its effects. The lion's paw is the Nasmyth's hammer in nature: woe to the human frame submitted to its force. It is therefore pretty apparent that if we look for the *most positive* cause of death in this man's case (for really there were many causes present on the body), we may fairly say that it was the blow of the paw that stunned and killed him on the spot, the lion first having seized him by the neck, as above described.

All this corresponds with the evidence given: the subdued exclamation of "Oh, oh!" was heard, so mournfully yet truthfully telling of his hopeless and hapless state. Again, we could not help remarking the absence of all other sound either of moan or struggle: and this showed the rapid succession, if not simultaneousness, of the man's exclamation, the blow of the lion's paw, and death itself.

After having struck the man down, the beast must have attempted to pick him up to carry him, for the thigh was covered with wounds (as though it had received a charge of small bullets). These were probably caused by the teeth of the animal, who, finding that he could not obtain a firm hold near the knee, had fastened his teeth into the groin from the inside; the

deep wounds—one above the os pubis, the other below—indicate this. As remarked by Mr. Miskin, the wounds in all places were much more serious than at first sight they appeared to be, the parts being much bruised.*

It is well known that the cat tribe are most difficult to tame, in the ordinary acceptation of the word; they may become docile, but they can never be entirely depended upon. The dominion which a man has over a lion is moral, not physical; the moment the lion finds this out he will take advantage of it. The lions well knew that Mr. Crockett, "the lion-tamer," was their master—they obeyed and respected him; and it was most worthy of note how rapidly he drove these animals from the theatre back again into their cage after their midnight wandering in the boxes and stalls, showing what command he had obtained over them. The unfortunate man who was killed probably ran from the lions: if he had stood still, and boldly faced them, he would have had a better chance for his life.

* There is, I believe, no record existing where the effects produced upon the human frame by the attack of a lion have been carefully recorded by members of the medical profession. I avoid medical technicalities as much as possible. I therefore venture to give them as above.

KOPISKI, THE LION TAMER.

I CANNOT help thinking that there is a faculty in the human mind of which no notice has ever been taken by psychologists. I mean the peculiar sympathy that exists between men and animals whether wild or domesticated.

It is not everybody who possesses this faculty. In some it is totally deficient, in others it is largely developed. Thus, for example, are there not those who shudder when a toad crosses the path, who are afraid of going into the kitchen after dark because of the black-beetles, who scream when they meet a poor rat on the stairs, who pass sleepless nights if they think a spider is on the march about the room? Some even have a natural antipathy to dogs. A friend tells me of a case where a gentleman most cordially hated dogs: the dogs in return hated him. The mutual antagonism ended by one of the squire's own dogs being killed by the keeper when fast hold of his master's leg.

There are, on the contrary, those who will walk up straight to the most vicious horse, and even though the

individual lady or gentleman be a perfect stranger, the animal seems at once to lose its ferocity, and to "cave in," as the Yankees say, in a moment. Again, many have a wonderful power over dogs, and are able to manage dogs which are unapproachable by ordinary individuals. That this sympathy—may we not call it a species of freemasonry?—is present in the animal as well as in the human mind is certain.

Mr. Baines, the well-known African traveller, informs me that when shooting in Africa he has been puzzled to know whether an object before him were the bare, leafless arm of a tree, or the head and neck of a giraffe. The giraffe seems to know that if he keeps perfectly quiet he will be mistaken for a tree; if he moves, his presence will become apparent to his enemy—man.

The moment the sportsman's eye meets that of the animal, according to Mr. Baines's experience, the creature seems to know that he is discovered, and immediately takes other means of saving his life.

Now, this freemasonry between man and animals has been practically brought to bear in the case of Lion-taming. As there are individuals who have naturally command over domesticated animals, so there are those who have this mysterious power over wild beasts. I always, therefore, look upon Lion-tamers as remarkable men. The lion is simply a big cat, with the bodily

structure of the cat, and the mind, so to say, of a cat. Like a naturally ill-tempered man, these large cats are for the moment all purring and civility, the next instant they will be the very embodiment of ferocity and blind passion. The individual therefore, who, with this knowledge, will deliberately walk into a cage in which there are no less than five lions, ought indeed to be credited with much courage; it cannot be called foolhardiness, because he knows his own powers.

In August 1866, I was requested by M. Kopiski to witness at the Pavilion theatre his performances in Lion-taming, and I must say I was exceedingly pleased. Kopiski is a strong man of the Blondin build, with a sharp, commanding eye, and a quiet, gentleman-like countenance, upon which fear has never made her marks. He comes forward with nothing in his hand but a riding-whip, drives the lions to the far end of the cage, opens a little door, and is inside the cage in that space of time described in certain county lingo as the "shake of a sheep's tail;" the lions are instantly all alive at the presence of their master, and run about the cage like a pack of hounds just let out into the grass-yard. Whether they hate or fear Kopiski most I cannot say; anyhow, their snarling shows that they know he is among them. Standing by the side of the cage, he makes the lions jump (like greyhounds over hurdles) in a consecutive line, one after the other. He then

stops the lioness in her course, and placing himself in a recumbent position upon her body, as though he were lying upon a sofa, he causes the big lion to rear up on his hind legs and stand right over him. This group is, to my mind, exceedingly classical and beautiful. Kopiski then shows in other ways how perfectly he has command over his den of lions, any one of whom could kill him in a moment with a pat of its sledge-hammer paw *if it dared*, but the beast knows not its own strength ; it is cognisant only of the wonderful " dominion " which man has over it and its tribe.

I much admired the manner in which he managed his five beasts without the least assumption of bounce or swagger.

SIR EDWIN LANDSEER'S LIONS.

EVERYONE by this time (February 1867) has seen the four lions now placed on permanent duty at the foot of Lord Nelson's column at Charing Cross, and everyone I suppose has formed his own opinion about them. From our infancy upwards no object has been more frequently submitted to our view than a lion. From the days when we learned in the alphabet-book that "L was a lion" the figures of lions of all shapes and sizes are daily brought to our notice. Most of these lions are simply caricatures, as unlike the real animal as the heraldic lion, fighting with the unicorn, is unlike the monarch of the desert. The reason is very evident. This wonderful creature is so beautifully constructed by nature that the eye is deceived, and imagines that it is an easy task to represent it either by drawing or by sculpture. To those who think it is an easy matter to represent a lion, I would simply say, "Just try to do it. You will soon find out your mistake." It is on this account, according to my idea, that many of our friends should be very careful in giving any opinion at all as to

whether Sir Edwin's lions are good or not. I candidly confess that I did not trust myself to criticise without care and painstaking; but nevertheless having in "Land and Water" promised so to do I made the attempt. In company with Mr. Bartlett, the Resident Superintendent of the Zoological Gardens, who I suppose has bought and handled more lions, alive and dead, and knows more about them than any man in London, I carefully examined the details of every one of Sir Edwin's lions. We separately took notes and mental photographs of them, and, this done, we took a Hansom's cab, and went as fast as we could straight to the Zoological Gardens, and carrying the details of the bronze lions in our mind compared them immediately with the live lions. The result is—and we trust Sir Edwin Landseer will not be offended at the course we have pursued—that we can find no fault whatever with the details, anatomical and otherwise, of his four wonderful statues. The contour and set of the ear is perfectly right. The complicated flexures of the opening nostril are true to the eighth of an inch. The twist of the lower lip, which somewhat resembles a double **S** is perfectly modelled to nature, and the tongue and teeth are quite correct. The position of the canine-teeth in the heads of model lions is one of the best tests I know of painstaking observation on the part of the artist. Nine out of ten sculptured lions will be found

to have (according to the artist's idea) the canine teeth of the lower jaw *behind* those of the upper, whereas in the animal itself the canine teeth of the lower jaw lock in a well *in front* of those of the upper. Reader, if you have not a lion's skull by which you can see what I mean, please take your domestic puss from off the hearth-rug and separating her lips, look at her teeth, and you will see it in a moment—viz., that in nature the lower canine-teeth are in front of the upper.

People have found fault with the hair between the ears of the bronze lions; it looks like a sugar-loaf peak. This peak is to be found in nature. Some say there is too much hair along the lower parts of the body. Look for a moment at the old lion at the Zoological Gardens, and the doubter will see whether he or Sir Edwin Landseer is right. Much fault, has also been found with the apparent thickness and clumsiness of the fore-arm and paw. Well, I confess, they do look somewhat gouty, but this is perfectly unavoidable. In testing the bronze by the side of the living lions, the reason for this is at once obvious. From the elbow-joint downwards the skin, in nature, is covered with short hairs, so closely set together as to resemble the pile of a lady's velvet dress. Again, the paw itself—that terrible weapon of destruction, which looks so harmless when quiescent—has, in nature, its margin formed by a lovely fringe of loose hair. Now, if a cast of this fore-arm and

paw were to be made in plaster from the living lion himself, the limb would come out as unlike the original as anything can be imagined. The reader may ask, How can you know this? Simply because I have been lately casting a great deal myself, and I have now before me a cast of a common hare, which I made in plaster but a few days since, taking the greatest care to get the details well moulded. The legs of this hare look as if they were cut out of a log of wood; and yet I know they must be right, because they are cast from the original. The cast of this hare leads me to the conviction that if Sir Edwin had made a bronze cast of the actual body of a lion, it would have looked as unlike a lion as it possibly could. My hare does not look the least like a hare; nor does a fox's head look the least like a fox—so difficult, nay, impossible, is it to represent light delicate fur in a solid substance, though smooth-skinned creatures, such as fish and reptiles, come out wonderfully when modelled in plaster. There are of course no claws represented in the statues. These are, like the English Army and Navy, not thrust forward in a swaggering and boastful manner, but are still ever ready for action at a moment's notice. The bronze shows the marking on the front part of the foot, under which these claws lie concealed.

Sir Edwin had another difficulty to contend with in modelling the face of these lions, and one I do not

think any of the critics have at all noticed. In the common cat, and more especially in the lion, it will be found that those beautiful and delicately-formed structures which spring from the upper lip, and which fall downwards and outwards in such graceful curves—I mean, of course, the whiskers—as well as the hairs which overhang the eye, projecting forward and upward, to say nothing of the scattered hairs between the ear and the nose, are wanting; and why? because it was impossible for Sir Edwin to represent them in the bronze; and if imitated in wire or other substance they would become absurd. The bronze lions at Charing Cross have, for this reason, no whiskers or other projecting hairs about the head, and therefore the artist has had as much difficulty in representing their features as a portrait-painter would have in producing a truthful portrait of a Lifeguardsman without his moustache and whiskers, or a sculptor a spectacle-less bust of an old gentleman who had never been seen by mortal eye but with huge spectacles on the bridge of his nose.

The attitude of these Charing Cross lions is very good, inasmuch as it is the natural attitude of an animal in repose, but ready at a moment's notice to spring upon its feet, the very embodiment of strength and ferocity. "Soldiers on the watch, but standing at ease." Reader, if you are not content with the attitude, examine a statue of a lion in the recumbent posture; you will

find him in the entrance hall of the Polytechnic. You will then see what a great difference there is between Sir Edwin's lions and that to which I now call attention ; and you will, I think, agree with me that Sir Edwin has chosen the right posture. Again, if you examine twenty separate lions, you will find no two alike, any more than if you examine twenty men, or as many horses, will you find two alike. There are two lions now at the Zoological Gardens, one fifteen years old, the other nine years old. These creatures will serve as an example : by the accurate observer they will be found to differ in many points, especially in their physiognomy. The first sunny day test your powers of observation with these two fine beasts, and compare them with the Charing Cross bronze statues. Sir Edwin, it appears to me, has given the portrait of no lion in particular. As the face of the celebrated Apollo Belvedere, or the Venus de Medici, are the portraits of no individuals in particular, but the embodiment of human beauty and grace, so Sir Edwin's statues are the portraits of no particular lion, but simply ideals of what is called "Leonine beauty," both of form and expression.

England being a free country, everybody has a right to his own opinion, and I for my part venture to record that these statues are faultless, and that they do the highest credit to the great naturalist of our artistic world, Sir Edwin Landseer.

TIGERS.

THOUGH I have not had much to do with live Lions, yet one day I had great fun with a young tiger. My friend Mr. Bartlett kindly sent over to the Regent's Park Barracks, to report that they were all ready to "pack up a tiger," and would I come over? Of course, I was soon at the Gardens, and a curious scene took place.

The tiger to be "packed up" was about the size of a good big sheep-dog (only, of course, longer in the body). She had been captured as a cub, and brought over from India on board ship, where she had been made a great pet of by the sailors, and was in consequence more or less tame.

"Puss" (for that was her name) was in one of the big dens next to the large lions, having for her playmate a young leopard.

The cage in which she was to be placed was wheeled up in front of the den, and laid on its side; it was simply a large box with strong broad wooden bars on one side (the two centre ones taken out), and two strong

bits of wood so arranged as to be screwed down in front of *all* the bars when the beast was safe inside. I write *when*, because it proved no easy task to get her into this box. All preliminaries being arranged, Cocksedge, the keeper, who knows no fear with his beasts, went into the den with the tiger, and called "Puss, puss, puss," in an amiable manner. The tiger came bounding up in a kitten-like fashion; she carried her tail erect over her back, and then raising her fur, began to purr and rub herself against his legs. Cocksedge then took a bit of rope out of one of his capacious pockets, and proceeded to pass the end of it under Puss's collar. Puss in the meantime began to play with the slack of the rope, as though it was great fun. Cocksedge, having fixed the rope, began to draw Puss gently towards the door. She did not seem to care about this very much, but still thinking that "a romp" was meant, patted the rope with her paws. Cocksedge, however, got outside the door of the cage, and pulled harder. Puss began to think that something more than a game of play was meant, so she extended her paws, and pulled well backwards, while her expression seemed to say, "two can play at that game, my friend."

Another keeper then got into the den, and giving her a gentle lift up behind, out she went of the open door, on to the stone space which is railed off to keep

visitors from the bars of the dens. The moment Puss felt she was out of the cage, she crouched down, lashing her tail, as though determined not to move an inch. The box was brought nearer, and the rope passed in round one of the bars, and then outside again. The keepers began to pull gently and slowly upon it, the only result being to bring the "mountain to Mahomet"—i.e., the box to Puss, not Puss to the box.

When the box was close to her head, they gave a sudden pull on the rope, and at the same time advanced the box quite close to her. The result was most laughable. Has the reader ever witnessed the execution of "Punch," by hanging, in that most popular of street performances? "Punch," it may be recollected, cannot be made to understand where he is to place his head. In like manner, Puss could not understand what benefit could be derived from placing her head in the opening of the box before her: so the result of the pull on the rope, the advancing of the box, and the lifting of her hind-quarters, was simply to bring her head well on to the top of the box, several inches above the lid, her sprawling arms and legs being extended, spread-eagle fashion, in front of it. "Try again," therefore, was the word. "Look out," said I to Cock-sedge, "the strap round Puss's neck is only leather, and is very likely to give way." Accordingly, on the next trial, smack it went, and Puss, feeling herself loose

and free, instantly made a bolt for it. Cocksedge, with his usual coolness and courage, snatched at her as she was slouching quickly away, and got fast hold of her tail.

Like the cats used in that refined, but barbarous punishment of the poor niggers, where a common house-cat is placed on the black man's back, and her tail smartly pulled, so did our "Puss" instantly extend all her sharp talons, and hold on, spread-eagle fashion, as well as she could, to the stones, thus giving time and opportunity for the rope (without the strap) to be placed round her neck. A trial was again made to get her into the box; but Puss, having by this time found out that Cocksedge was in earnest, showed fight in the most wonderful manner. She put back her ears, showed her young, yet terrible fangs, and struck at any intruding human limb with her broad, talon-armed pads; she had quite lost her temper, and was a true embodiment of the phrase the nurse sometimes applies to a naughty child—"She fought like a young tiger." At last, feeling somewhat exhausted, she sat down on her haunches, lashing her tail from side to side with real anger.

The rope plan was therefore given up, and the director of the proceedings, Mr. Bartlett, ordered the keeper to "fetch the bag." He shortly reappeared with a common sack, the open end of which was

mounted on to a strong pole (like an ordinary landing-net for fishing) the *shut* end of the bag being laced up, after the fashion of a Balmoral boot, only that the lace-holes were much further apart. Watching his opportunity, one of the keepers slipped the bag over her head (as a lady catches a butterfly on a hedge), and Puss was fairly in the bag: he then lifted it up, thinking she would stay quietly there. Puss thought otherwise, for the moment the bag was off the ground she twisted herself right round, her head instantly appeared at the mouth of the bag, and out she hopped like a "Jack-in-a-box;" her wrath in the meantime grew fiercer and fiercer, and she challenged all comers to deadly combat. Stealing up this time behind her, while Mr. Bartlett kept her attention engaged in front (the "Puss, puss, puss" days were over long ago), the keeper put the bag once more over her head, and lifting it up a little from the ground, another man tied a rope round it; it was then lifted up by means of the pole, and a pretty turmoil took place inside. Puss scratched, yelled, and jumped about so, that one would have thought that the keeper had caught a real live demon. This turmoil, however, did not last very long, for the closed end of the sack was placed over the opening in the box, the lacings carefully undone, and Puss fell into the cage by her own weight.

It made me laugh to look at her face when she was a

prisoner. She peered out from the wrong side of the bars with her bright but glaring eyes, which seemed to say, "Well, you have done me now. If I had known what the lot of you were about with your 'Puss, puss, puss,' and your fawning civilities a quarter-of-an-hour ago, nothing would have induced me to come out of my den so readily. Confound that sack, that's hardly fair." When the conquered Puss was safe in the box, the victorious Cocksedge rubbed his hands and set to work vigorously to screw down the bars which were to keep her in. "You're all right now, you tiresome young hussy," said he, "and off you'll go by to-night's train to Mr. Edmonds's menagerie, at Manchester; and I only hope they will use you as well there as I have used you here." And this is the way "we let the cat out of the bag," and got her in again.

JAMRACH AND THE RUNAWAY TIGER.

IN Mr. Edmonds's menagerie I saw the tiger that escaped from his cage in Mr. Jamrach's (the animal dealer's) yard, and seized a boy in the street in Ratcliff Highway. An authentic account of this tiger adventure in the streets of London has not to my knowledge ever been published. I make it my rule to get my information on such matters, if possible, first hand. I therefore give the story as Mr. Jamrach told it me himself.

It appears that, in October 1857, Mr. Jamrach purchased "a lot" of animals from a ship arriving from abroad, and among them a large tiger in a den. During the voyage the weather had been very stormy, the sea had frequently washed over the decks, the tiger's den partaking in the general wetting.

When the ship arrived at the London Docks, the den was put in a van and deposited in Mr. Jamrach's yard, with the bars towards the wall. The den having been thus placed, Mr. Jamrach walked away, when, on turning round a few minutes afterwards, he saw that the tiger had reared herself up on her hind-legs, and was pressing hard on the boards.

In a few moments these boards, which were rotten from the wet, "let go," and out walked the tiger through the yard gate into the street. A little boy, about nine years old, happened to be playing there. The little fellow, thinking that the tiger was a big dog, walked up to her, and began patting her; the animal then turned her head, and seized the boy by the shoulder with her tremendous fangs. Jamrach immediately ran up, and grasped the tiger by the loose skin of her neck; but, although a very strong and powerfully-built man, he could not hold the beast, which immediately started off down the street at a gallop, carrying the boy in her mouth as a cat would a mouse. Jamrach held on tight all the time to the tiger's neck, and kept up with long

strides by her shoulder, like a groom by the side of a runaway horse.

Finding that his hold was giving way, he managed to slip the tiger's hind-leg from under her, and tumble her to the ground. He then instantly threw his whole weight down on her, and letting go the skin of her neck, fastened his two thumbs behind her ears with a firm grip. There tiger, man, and boy lay many minutes all together in a heap, the man gripping the tiger, the tiger (still holding the boy in her fangs) all the while suffering from the pressure of Jamrach's hands and from impeded respiration. After a time one of Jamrach's men was actually bold enough to put his head round the corner to see if he could render his master assistance. Jamrach cried out, "Bring me a crow-bar!"

The man got a crow-bar, and struck the tiger three severe blows on the nose with it, which made her drop the child from her mouth. Jamrach then sent him for some ropes; these ropes, of course, in the confusion, became entangled, and the tiger, watching her opportunity, sprang up, and getting loose, ran back again up the street, Jamrach after her, crow-bar in hand: she bolted round the corner, through the yard gate, and leaped into the den, from which she had escaped. Once inside, she cowered down and lay quiet, and panted like a hunted fox.

The child was, strange to say, not much hurt. He

had only a bite on the shoulder, which got well in eight days. The poor little fellow, however, was so terribly frightened that he never spoke a word for four hours.

Mr. Jamrach got the worst of this affair; for, having had to fight the tiger, he then had "to fight the lawyers," and the whole business cost him, in damages and law expenses, over 300*l*. He had, in fact, caught a Tartar; "for," said he, "there was a lawyer as well as a tiger inside the tiger's skin;" he had "first to tackle the tiger, and then the lawyer afterwards—too much for any man's nerves."

This story of the child and tiger got into the newspapers, and Mr. Edmonds, seeing the account, came up from Birmingham (where his menagerie was then being exhibited) and bought the tiger for 200*l*. He put it in his collection, and advertised it as, "The tiger that swallowed the child in Ratcliff Highway." Everybody, of course, went to see it, and the purchase turned out a good speculation for *about four days*, but no longer; for this very tiger, remembering, I suppose, her last expedition, when the men were gone to dinner, put her claw into the partition of her den, pushed it out, and walked into the neighbouring den, in which dwelt a Lion worth a large sum of money. The tiger immediately attacked the Lion, catching him by the throat, and in a few minutes killed him. This same tiger is, I believe, still being exhibited in Edmonds's menagerie.

I really think, and doubtless my readers will agree with me, that Mr. Jamrach deserves very great credit for attacking his fierce and runaway tiger single-handed, and rescuing the poor little boy. I record the story as a testimony to his courage and pluck.

COLONEL RAMSAY'S TIGER.

IN December 1863, Mr. Ward, taxidermist, of Vere Street, Oxford Street, invited me to examine a magnificent specimen of a tiger, which he had lately set up for Lieut.-Colonel R. A. Ramsay, late Commandant, 3rd Ghoorka Regiment. The gallant Colonel had shot the noble beast when hunting at Huldwane Kumaon Terai, North West India, and wisely determined to have him preserved, that his friends in England might see what a monstrous brute a full-grown tiger really is. Having seen this tiger in Mr. Ward's shop, I called upon the Colonel, and requested him to be good enough to allow his tiger to be placed in "The Field" window, in the Strand, that the public might have an opportunity of seeing and admiring him. The Colonel most kindly consented to this, and, for a considerable time, there was always an admiring crowd round the window. The following is the account he gave me of this noble trophy of his sport:—

"I can say little regarding the death of this tiger, as he fell dead to my second shot. In January 1861, I left Almorah, a station for a Ghoorka Regiment in the Himalaya, and remained at the foot of the range, at a place called Huldwanee, in order to enjoy a few days' sport before quitting India. My friend Major B—— and myself started one morning for a beat through a favourite part of the forest running along the foot of the outer range of hills, where the sambur, spotted deer, and pig abound, also an occasional tiger. We had bagged five or six sambur, four pigs, and some spotted deer, when, on our way home, I asked Major B. to take a turn to the right through a likely piece of covert, and I would move straight on. In about five minutes I heard the grunt of a tiger—a welcome and well-known sound to all sportsmen in India—and looked towards the direction from whence it came, and, to my delight, I saw this fine fellow bounding across the forest about eighty yards in front of my elephant. As quick as thought I took up my rifle, sent two shots at him, and over he rolled—one having taken effect in the stomach, and the second in the head, behind the ear. I have killed tigers before with one shot (through the heart), but I never saw one drop so suddenly as this. From the perfect state of the skin, and fine condition of the animal, I should say he must be about twelve years old, and accustomed to the fat of the land in the way of cattle. Tigers that prey upon the human species are generally mangy and out of condition. A brother of mine out shooting along the same line of country, last March, came upon five tigers, all huddled together like a litter of puppies. It was rather late in the afternoon, and after hard fighting three were bagged, one having bolted at first, and darkness prevented the fifth coming to bag, as he was severely wounded, and an hour more daylight must have insured him. I never heard of more than three tigers being seen together except on this occasion."

In setting up this tiger, Mr. Ward, as it were, composed a picture, which he called "The Intrusion." The

position chosen for the beast is that of drinking, or rather, just disturbed from drinking. The water is beautifully represented; it is transparent as crystal; objects can be seen at the bottom, and there is a slight ripple on the surface, as though a gentle breeze were blowing. The beast is standing on rugged rocks, and the leaves of the jungle plants are tastefully arranged about, so as to give the idea of a desert and waste place. The tiger is looking up from the water, evidently having just heard the approach of his enemies, and is snarling fearfully at his peace being disturbed. However, on this occasion certainly he did not make up his mind quickly enough what to do, for he ran from his fancied security, and was shot dead upon the spot by the gallant Colonel, before (as the Yankees say) "he knew what had hurt him." Lucky it was that the Colonel was able to slay this huge brute with so little trouble, for a tiger is nothing more than a big cat; and if a cat has nine lives, and a tiger is ninety times bigger than a cat, it follows that a tiger has eight hundred and ten lives, so that it was a lucky shot that destroyed all these lives at but two pulls of the trigger.

It will be recollected that, in the International Exhibition of 1862, two very fine tigers, shot by Colonel Reid, were exhibited.* Colonel Ramsay's tiger was

* Mr. Ward, jun. exhibited, in the Paris Exhibition of 1867, a very striking group of a lion and tiger fighting. He calls it "The Encounter."

larger than either of these. I give his dimensions, as taken by Mr. Ward, jun. and myself:

● DIMENSIONS OF COLONEL RAMSAY'S TIGER.

	Ft.	In.
Length from nose to end of tail	12	0
Length of tail	3	9
Height from heel to shoulder	3	7
Extreme length from shoulder to toe	4	2
From elbow to point of toe	2	5
Girth of body behind shoulders	5	3
Girth of fore-arm	2	10½
Girth of neck	3	7
Circumference of head	3	8
From ear to ear	1	6½
Length of upper canine teeth	0	3
Length of lower ditto	0	1¾
Circumference of upper canines at gums	0	3
Breadth across the chest from head of one humerus to head of other	1	8
Length of claws	0	3

In order to compare these measurements with those of other tigers, Mr. Ward, jun. kindly furnished me with the following:—

AVERAGE SIZE OF TIGERS.

	Ft.	In.
Length from nose to end of tail	9	5
Length of tail	2	10
Height from heel to shoulder	3	2
Extreme length from shoulder to toe	3	11
From elbow to point of toe	2	0
Girth of body behind shoulder	5	3
Girth of fore-arm	2	7
Girth of neck	3	0
Circumference of head	3	3

The gigantic proportions of Col. Ramsay's tiger will, by these measurements, be duly appreciated.

As regards the age of the beast, I believe the Colonel's idea, that he was about twelve years old, to be quite correct, backed as it is by the opinion of General —, a great authority on these matters. It is generally supposed that the natural duration of a tiger's life is about twenty years.

It is just as well these tigers should be slain, for the "Burra Bagh," or big tiger, is not only, like all cats, a great thief, but also a murderer as well.* There is a story told of one tiger, who, in six months, killed and devoured forty natives, out of whom sixteen were postmen, these poor fellows being obliged to be out at all times and in all weathers, carrying about the letter-bags. As our own domestic puss knows well enough where the sparrows come to feed, and will sit and wait for them for hours together, so the "Burra Bagh" knows which way the postman will come, and will wait for him as he is walking on his lone journey, spring out from behind some dense bush or favouring rock, knock him down with a stroke of his immense paw, and carry him off to devour him at his leisure. A human being in the mouth of a tiger is perfectly powerless. The strength of a man is nought as compared to that of a tiger; and even should he escape instant death, the wounds received often prove fatal.

But the worst of all tigers is the man-slayer, generally

* See Appendix, number of wild animals killed in India.

a worn-out old beast, whose claws are too blunt, and teeth too much worn down to hold (even if he could catch him,) a deer, a buffalo, a sheep or a goat. The brute, therefore, takes to eating men and women, and especially the latter, when they go to fetch water for domestic purposes. But the brave hunter demands revenge, and he shoots the tiger, and then rifles the murderer's den. What does he find? "The old Skekarry" will tell us.

"This was evidently the hecatomb of the man-eater, for I counted, from skulls and other human remains, about twenty-three victims of both sexes, as we could see from the hair, clothes, broken armlets, and gold and silver ornaments belonging to native women. We picked up two massive silver bracelets belonging to his last victim, whose remains were identified by the villagers who were with us. We also found two gold teckas, or neck-ornaments, which mark the married women, and a knife which, we were assured, had belonged to a postman missing about a month before."

In the Islet of Singapore also, the tiger is a terrible scourge, because there is no game upon the island, and he is driven to prey on human beings. Chinese coolies are the sufferers, to the extent of, perhaps, five hundred every year, about four hundred being the reputed average of cases reported, which is considerably more than one man every day.

We English folk, especially the ladies, are, I am well aware, always ready to admire what is beautiful, whether in nature or art; and what can be more beautiful than the markings on a tiger's skin, be he dead or alive? The lion's coat is of a tawny sand colour, that he may escape observation when drawing up, in the grey dawn of the morning, on the unsuspecting antelope (there are no true deer in Africa: south of the Atlas they are all antelopes). The coat of the tiger is of a very different nature; its groundwork consists of a yellowish pattern, which is slashed, as it were, with long broad black stripes.

Now this is the very coat which is most suited for the dense jungles, where the tiger loves to dwell, viz., amongst patches of a shrub called corinda, which is common throughout most parts of India. It is not a tall-growing bush, but its leaves are closely set, and droop so as to form a series of dark leafy tunnels, affording a delightful cover to the beast. He also frequents the jungle of long grass and reeds, and, when skulking through the dark shade, either of corinda or jungle, it would be almost impossible to make out his huge cat-like carcass creeping along like a silent shadow.

The marks upon the tiger's head, moreover, are very peculiar. If we ordinary mortals were to have a tiger's head presented to us, from which the spots

had been rubbed out, and were to attempt to put them in again, we should probably so dispose them that we should cause the creature's face to be anything but graceful or pretty; whereas Nature's mode of "enamelling" is really a good bit of work, and will stand the closest examination. The New Zealanders tattoo their faces, but make their patterns in a more or less spiral form. The patterns on the tiger's face are disposed generally somewhat in the form of a W; and if there be a well-shaped W over the eyes, the more beautiful is the skin in the opinion of tiger-hunters and naturalists.*

Anxious to obtain information about certain par-

* Mr. Blyth thus writes in "Land and Water":—"Recently, when in the shop of Mr. Ward, jun. of Wigmore Street, Cavendish Square, I was shown a most remarkable tiger skin from Central India (!), utterly unlike any other which either myself or a military friend of great experience in the matter who accompanied me ever beheld previously. This tiger skin has just double the number of stripes of any other that I have seen, and a considerable extension of black along the middle of the back. Of black tigers I have heard of many alleged instances, but not of one authentic case; for they all proved to be black pards, which are not uncommon in various localities. Of albino tigers I know of three instances, and one of them was exhibited many years ago in London, in Exeter 'Change, and a figure of this animal appears in Griffith's English edition of the "Règne Animal" of Baron Cuvier. Hybrids, between the lion and tigress have been several times produced; but the tiger breeds less freely than the lion in a state of captivity. Three to five cubs constitute the usual produce."

ticulars relative to tigers, I put the following queries in the "Field," and the editor (the late Mr. Crockford) and myself received the following interesting and valuable information from gentlemen who were kind enough to allow their notes to be published.* It is by friends kindly unearthing and utilising the information they possess, that valuable facts, which would be otherwise unrecorded, are made public for the benefit of all.

QUERIES AND ANSWERS RELATIVE TO TIGERS.

No. 1. Are there more than one species of tiger? and what is the average weight of a tiger?

Many native shikaries say there are two species. They describe one as being very long in the body and short in the legs, very active, can make enormous springs, and far more ferocious than the other, but at the same time very rare. Amongst sixty odd tigers, at whose deaths I have been present, there were three which were certainly peculiar in their form. In length they exceeded average tigers, but their heads were very small, and their bodies remarkably lightly made. They greatly resembled the figure of a panther, and I believe they could not have been two-thirds of the weight of an ordinary-made tiger of the same length. I consider, however, that these were merely individual peculiarities, and I have no doubt that it is meeting with odd cases like these which causes natives to fancy that

* I now quote from the "Field," various dates in 1863.

there are two species. It is a fact, I believe, that tigers which live in flat countries are, on an average, considerably larger than those which occupy hilly districts. I have never seen a tiger weighed, but judging from the number of men required to lift a full-grown one, I should think 700 lb. would not be very far from the mark.—J. (Central India.)

I never weighed a tiger, but judging from other game, I should say he might weigh 6 cwt. A camel's load is supposed to be 450 lb., and he has much difficulty in carrying a tiger, even when gutted first, for a short distance: whereas the 450 lb. is his load for a fifteen-mile march. Col. Ramsay's tiger is a very large one, but I have seen certainly three if not four or five larger ones, and have killed one myself, *on foot*, 12 ft. 7 in. long. I have seen two over 13 ft. long. You say, "If the sportsman does not kill the tiger, the tiger kills him." In *some* instances, of course, you mean; but very *rarely* if *perched* atop of an elephant.—M. B., 72nd Highlanders.

With regard to the weight of a tiger, I can only give a rough guess. I remember that on one occasion a large tigress which I had shot was carried off (as it fell) to my tents, a distance of three or four miles, at a pretty good pace, by eight men. It took twelve men to carry home a large sambur stag, which was shot shortly afterwards, which the villagers stupidly did without first taking out its inside. Having frequently seen various descriptions of deer weighed, I should fancy that the sambur I refer to would have weighed as it fell about 600 lb. So that, supposing that the men were individually carrying nearly the same weight, the tigress would have weighed about a third less, i.e. 400 lb. The tigress I referred to measured $9\frac{1}{2}$ ft. in length; a tiger of the size of the one exhibited in the "Field" window would most probably weigh fully half as much again. Shortly after my return from India, I went and had a look at the tigers in the Regent's Park. I noticed particularly that, though fine specimens of their kind, they looked very much thinner than those I had seen a month or two before in the jungles. So that a person attempting to judge of the weight of a tiger in the natural condition, by looking at these, or in fact any other in

confinement, would have to add about a fourth to the weight, at least. With regard to there being more than one species of tiger in India, I think there can be no doubt that the tigers which inhabit the Terrai and jungles along the foot of the Himalayas are very much larger than those met with in the hills and jungles of Central India. The latter are frequently called "hill tigers," to distinguish them from their larger brethren of the Terrai.—SINGBOWLEE.

I have ascertained the weight of bullocks by the following rule: Measure round the animal close behind the shoulder, then along the back, from the fore part of the shoulder-blade to the bone at the tail. Multiply the square of the girth by five times the length, both expressed in feet. Divide the result by twenty-one, and you have the weight of the four quarters in stones of 14 lb. In very fat cattle the weight is about a twentieth more than that ascertained in this manner; while very lean cattle weigh about a twentieth less. The quarters are little more than half the weight of the animal. The skin weighs about one-eighteenth, and the tallow one-twelfth of the beast. You could ascertain the weight of Col. Ramsay's tiger by this rule. You have not given the length required, or I would have sent an approximate weight.—R. GREENWOOD. (Kilkhampton, Stratton, Cornwall.) [A gentleman who has examined the tiger, guesses his weight to have been 44 stone, or 616 lb. at 14 lb. to the stone.—FRANK BUCKLAND.]

In regard to the size, I do not think there is anything to denote a distinction, though the size of the Bengal tiger has generally been considered to be greater than that found in Upper India, and more especially in the hilly tracts of Central India; but Col. Ramsay's specimen is a proof that in all parts they do attain a very great size occasionally. The colour of the skin as a rule indicates the age; a very old tiger becomes quite pale, and a young full-grown one is always of a deep colour. India, you must recollect, is a wide region.—C. B.

SIR,—Seeing a question by Mr. Buckland in "The Field" about the weight of tigers, perhaps the following information may be of some service:—I weighed two tigers at the Quarter-

master's store, 8th (the King's) Regiment, at Camp Decsa, Guzerat. One on March 21, 1852, 329 lb.; the other on February 11, 1853, 452 lb. The latter the largest tiger I saw in India.—A. S. G.—P.S. Both tigers were killed about three p.m., and weighed about six a.m. next morning.

We find tigers in this country up to the foot of the Himalaya Mountains, and south as far as Ceylon. Their weight, of course, varies with their size. There is a very large one at a place called Sukkar, on the Indus, and which one I saw on my way down here a fortnight ago. The natives in charge of him say he weighs 425 lb., is 10 ft. $3\frac{1}{2}$ in. long, and $37\frac{1}{4}$ in. high at shoulder. He is of a very deep or dark yellow, and a "most perfect head," although the "W" mentioned in your paper was not distinct. The white parts were milk-white, and the jet-black spots on the dark-yellow grounding had a most handsome effect. His whiskers had not been cut, which perhaps accounts for his being taken by that great tiger shikarie, Major Marston. This animal, I may as well mention, is held sacred by the natives, and a fakeer, a native priest, is the head man who looks after him. He is kept in a large enclosure, and appears quite docile, as we (myself and party) patted him and caressed him. He is nine years of age. I am in hopes of bringing home a young one, together with my three leopards, the marks of which I consider far handsomer than the large stripes of the tiger. You can never judge the correct dimensions of these or any other animals after they are skinned, as they can be, of course, made to stretch so much. They should be measured when the animal is alive; and it is seldom that you are able in England to get or see them so tame as to permit you to put them in the different positions for measurement, and when it is the only time you can get anything like a correct measure. My large leopard, who is just one year old, is 6 ft. $6\frac{1}{2}$ in. long, 21 in. high at shoulder, foot 8 in. circumference (when extended much more), $26\frac{1}{2}$ in. round body under arm, 20 in. round head over the ears, $\frac{1}{2}$ in. claws, 14 in. elbow to toe; is beautifully marked, and fetches and carries stones or sticks out of water. They are quite different from cats in that respect, being very fond of the water. I have

had seven since I have been in this country, and at all ages, and find that, however tame they may be made, they never can be relied on. My two other little ones are unfortunately both females, and I am afraid there will not be enough food for the three on board ship, so will have to leave the large one (a male) behind. You can teach them to catch deer at any age, although it is of course better when they are young, and also easier.—A. C. KEYS LOCKE, Capt. 51st Light Infantry (Kurrachoe, Scinde, April 4).

The longest animal I remember to have seen during my residence in India was a male royal Bengal tiger, shot by the late gallant Major-General Sir W. R. Gilbert (the hero of the Punjaub in after years). It was in the year 1825, when that officer was residing at Balasore. This tiger was a confirmed "man-eater," and was killed off an elephant in the heavy jungles of the Hudderpuddah, in the zillah of Midnapore. He measured 12 ft. 2½ in. in length. A tiger was brought into the presence of Mr. Campbell, an indigo-planter, at Jellalore, in the same zillah, which had been killed by two "shikaries" (native hunters) with matchlocks whilst in the act of slaking his thirst from a nullah in the great Mohur-bunge (peacock forest); his length was 12 ft. 2 in.—D. G.

No. 2. What are the extreme limits of the geographical range of the tiger?

—I have just read Mr. Buckland's article in the "Field" on the geographical range of tigers. In General Ferrier's "Caravan Journeys," page 138, he mentions that the tiger is sometimes seen in the country near Karig a village on the boundary of Persia and Herat. In Capt. Langley's book, "Residence at the Court of Meer Ali Moorad," he mentioned the fact of Meer Ali having killed tigers near his capital town (of which I have forgotten the name) in Scinde. This looks as if the tiger was not confined to India alone.—R. A., Akolah, West Berar.

I send you a tracing of the zoological chart of the world, published in "Black's Atlas" of 1857, from which it appears that the limit of the so-called Bengal tiger is from about

10° south to 47° north lat., and from 44° to 136° east long.—H. R. H.

I do not think that tigers are found farther west than the north-west boundary of our Indian possessions, or farther east than the western boundary of China. You sometimes read of tigers being killed in Africa and South America, but they are a large species of panther, with spots or circular marks, not striped like the tiger of Bengal.—SINGROWLEE.

See also three articles on tigers by E. Blyth, Esq., "Land and Water," vol. i. pp. 231–255, 322.

When talking "tiger" matters over at a dinner-table, my friend, A. H. Layard, Esq., M.P., informed me that there was a range of hills running northwards from the Gulf of Cambray towards Delhi, and that this seemed to be the westernmost limit of the tiger; though it is reported that tigers have been seen in the province of Mazanderan, to the south of the Caspian Sea; the country there is very thickly wooded. They are not found at Teheran, the capital of Persia.* As regards there being a second species of tiger, we have pretty good evidence that there really exists another variety, which has not smooth hair, but has a *rough hairy* coat. This creature is to be found, and it is hoped skins will eventually be brought (even if a skin exhibited some years since at the Zoological Society be not that of the very animal in question). This hairy tiger is said

* By the map, I find that the province of Mazanderan is about one thousand miles, as the crow flies, from the western extremity of the Punjab.

to be found at and about the north-eastern extremity of the great Chinese wall, and also in the Corea—the peninsula between the Yellow Sea and the Sea of Japan—a country about which as yet we know positively nothing whatever. This hairy tiger is said by my late (alas!) friend, Dr. Falconer, to be nearly related to, if not the same as, the extinct fossil tiger, *Felis spelæa*.* I trust we shall get a specimen of this most interesting animal some of these days.

On this point my friend, N. L. Austen, Esq., in a valuable article on "The Varieties of Tiger and Leopard" in "Land and Water," writes of tigers and leopards:—

The tigers of the Altai mountains and Oriental Siberia appear to be much longer furred than those inhabiting the warmer portions of Asia. Even if not a separate variety, they present considerable distinctions, a friend having recently informed me that he had seen one of these skins, coming, I believe, from the Trans-Baikal region. He describes the fur as resembling that of an Angora cat in length. The colour was peculiarly light and the stripes indistinct, but I should attribute this to the effect of age. Would it not be probable that this long-haired tiger might have a near affinity to the formidable felines whose fossil remains are found in the European bone caves, and which, doubtless, at one time inhabited this island? Atkinson, in his interesting "Travels in Siberia" and in the Upper and Lower Amoor, frequently mentions this species, and states that he has seen several long-haired individuals in the museum of Barnaul, which were shot in the immediate vicinity. One of these tigers

* The teeth of the *Felis spelæa*, which Dr. Buckland determines among the fossils of the Kirkdale cave, exceeded in size those of the largest lion or Bengal tiger, but not in the same degree as the bones in the feet.

was, he states, an unusually fine and powerful specimen, two or three men being destroyed by the ferocious beast before it was killed. This variety of tiger seems to endure cold with perfect impunity, the thick and warm coating of fur securing it from the effects of the intensely severe Siberian winter. The Indian tigers in the Zoological Gardens assume a denser covering of fur about the end of autumn when the close and short summer coat is shed. It will be an interesting thing to ascertain whether the fur becomes longer or thicker at all during the rainy season in India, for though the tiger has not the same dislike to water so strongly implanted in the nature of the domestic cat, yet the sudden transition from the ordinary drought and aridity to the damp and steamy atmosphere of the jungles during the monsoon, may have some effect on the system.

A second large species of *Felis* (*F. irbis*) described as being clothed with long whitish fur, having the spots very faintly defined, has been found north of the Mouztagh or Celestial mountains, which are in latitude 42 degrees. It may perhaps, be identical with the snow leopard inhabiting the higher ranges of the Himalayas, which preys principally upon the ruminants that inhabit that lofty region.

The investigation of these varieties of tigers and leopards would be of great assistance to zoology, as most probably more than one species remain to be discovered, and sportsmen and travellers would do great service to science by taking every opportunity of clearing up the question.

Sidney Sussex College, Cambridge.

N. L. AUSTEN.

No. 3. Why do the natives pillage the whiskers, claws, and fat of the dead tiger? If they use them for charms, against what particular evil are they supposed to be efficacious?

The natives burn tigers' whiskers, not as a species of insult, but because they imagine they are deadly poison. They firmly believe that a tiger's whisker chopped up and introduced into anyone's food will assuredly cause his death. I have heard them

mention the names of people supposed to have been poisoned in this way. To prevent the possibility of being themselves put out of the world by this method, they destroy the whiskers as soon after the tiger's death as possible. The claws they hang round their children's necks as a charm against "evil eye." Natives fully believe that many individuals have the power of casting the evil eye, and they are as fully persuaded of the efficacy of this charm. Tiger's fat they consider a cure for rheumatism, and the smoke of burnt tiger's meat as a remedy for many other diseases.—J., Central India.

On one occasion, when I had been fortunate enough to bag three tigers, on their arrival at the tent a large number of natives collected round to look at them; my shikarie, however, would not allow any person to come near them until he had first singed off the whiskers of the tigers. When I remonstrated with him, and asked his reason for disfiguring them, he replied that they always made a point of doing so to prevent any malicious person getting possession of the whiskers, as the bristles chopped up and placed in a person's food would bring on internal inflammation and cause their death. Not being a medical man, I cannot say whether it would be likely to have that effect or not.

The claws are worn by children as charms, and are supposed by the natives to ward off all manner of evils. I never saw them worn by grown-up persons. The oil made from the fat is considered a good remedy for rheumatism, and the flesh, if given to a child to eat, is supposed to make it very strong.—SINGBOWLEE.

The whiskers are considered a most deadly poison; and it is almost impossible to avoid their being pulled out or singed off, to prevent their being made use of by some enemy. As a magistrate, I have received petitions informing me that such a person was in possession of tiger whiskers, and praying that they should be taken away, &c. If you question a native about them, he can give you no distinct notion of how they are to be used, though I have been told that the hairs are cut up into small pieces, and so given in bread, from which death is sure to ensue. The claws of the tiger are much prized by all classes, from the highest

noble or richest banker to the most lowly; they are supposed to keep off the evil eye, to prevent fever and other ailments. You generally see them worn, set in gold, round the neck of the young son and heir of the family. The claws of the last tiger I shot, about three years ago, were eagerly begged of me by some of the first nobles in the Punjab. The skin of the same animal was ruined as a specimen, though now in my drawing-room, by the whiskers being pulled out whilst I had turned my back for a few minutes. The fat of the tiger is, again, much prized to rub into the back and to make men lusty! Again, the tongue or a bit of the heart is frequently given by elephant drivers to the elephant they have charge of, to make him fearless.—C. B.

The natives burn the whiskers from superstitious motives. They use the claws as charms, hanging them by a string round the necks of women and children. Thus used, they are supposed to do almost anything—bring luck, produce children, keep off tigers—according to taste of wearers.—M. B., 72nd Highlanders.

By "The Field" of the 12th inst., it appears to me that very few, even amongst old Indians, know the real reason why the natives of India are so anxious to secure the whiskers of a tiger. If allowed, I will now, through you, give them the required information, which is as follows: A native imagines that should he by any means be able to get a man to take internally, by way of food or any other mode, a portion of a tiger's whisker, he (the administrator) will be able to obtain with impunity the power generally attributed to a love-philtre, and the person so operated upon, i.e., who has swallowed the whisker, will be utterly unable to prevent or punish the offender. It is well known that the natives of India are prone to intrigue, and they never lose an opportunity (either by fair means or foul) to possess themselves of these whiskers, which, when once obtained, they keep carefully by them till some beauteous dame finds favour in their sight. Then comes the time to show off their skill in administering the whisker. The whiskers of leopards are also sought after, but are not supposed to be so infallible as the tiger's.

The claws of a tiger are simply looked upon as a charm, and are generally worked up in silver or gold, and worn round the neck to keep off an evil eye.—JUNGLE HUNTER.

The superstitions regarding tigers, as about other things, vary in many parts. At some places the whiskers are instantly burnt off, to prevent the tiger's ghost haunting the village near which it has been killed.—C. B.

The natives have a superstitious belief, that unless the whiskers of a tiger are singed off immediately after he is killed, they will be haunted by his ghost. So says Col. Campbell, of Skipness, in his "Sporting Journals," now passing through the press. Col. Ramsay's tiger appears to be a fine beast; I have only once heard of a larger animal. Lieut. Rice mentions that the largest he ever killed or saw measured 12 ft. 7½ in. from nose to tail.—D. D.

When the shikaries bring their tiger-spoil before the "collector of the zillah" in which the beasts of rapine are destroyed, they receive by custom 100 sicca rupees for the same, whilst the tusks and talons are abstracted from the heads and feet of the beasts, and consigned to capacious chests in the collectors' cutcherry (treasury). In those chests, at Midnapore, some bushels of the above dental relics have been deposited from time to time, as they have been brought in to the collectors by the hunters.—D. G.

The natives believe the tiger's whiskers poisonous in another way not mentioned in any of the answers given. It is this: a portion put into the chilluw a man is smoking will prove fatal to him. The claws, I have been told, when hung round a child's neck keep it from starting in its sleep. A chief in Scinde, who brought twenty armed followers to beat for tigers, condescended to walk off with my share of the fat, which I intended to keep for a friend. Natives have been known to follow an officer from Kurrachee up the northern frontiers of Scinde, in hopes of getting some tiger's fat. It is considered a cure for rheumatism, and when rubbed in is said to cause an eruption of the skin. The tongue of the hyæna is also prized by the natives of India. They believe it possesses the power of dissolving fish-bones that

stick in the throat, and also that the saliva of the hyæna melts bones.—GEORGE MONTGOMERY (14th Regiment, Ahmednugger, March 26).

It will scarcely be believed, but there are superstitions almost equivalent to those prevalent in India still existing in this great metropolis, for an application was made not long since to my friend Mr. Bartlett, for some hair off the back of a lion, which a woman asked for in order to give to a child, to drive away fits. Again, it will hardly be credited, but still it is a fact, that in 1862 a book* was published in London advising the administration in consumption of the actual *copros* (or dung) of various snakes, that of the boa-constrictor and the "warning lizard" of the Nile being thought particularly efficacious. Medicinal virtues are also supposed by the author of this book to be present in the excreta of the African cobra, the Indian rat-snake, the black Australian viper, the American water-viper, the Australian stump-tail lizard, the common chameleon, the Indian and box-tortoise. Surely we are returned to the days when physicians prepared their drugs according to the receipts in Pomet's "History of Drugs," 1712. The only person who benefited by the new kind of medicine of 1862 was probably the keeper of the reptile house at the Zoological Gardens, the "excreta" being his perquisite.

* "An Enquiry into the Medicinal Value of the Excreta of Reptiles." Longmans & Co. 1862.

The idea of a hyæna's tongue being a solvent for bones, is evidently founded on the fact that the hyæna has amazing power of cracking the bones of animals with his tremendous teeth—an important bit of evidence as to the condition of England when hyænas lived in the caves of Yorkshire, Cotswold Hills, Devonshire, &c.* The hyæna, too, has also the power of digesting the bones after they have been swallowed, as the examination of the *album græcum*, found in the dens of captive hyænas, will amply prove; or, as the late Phil Duncan of New College wrote, when describing my father's discoveries of bones at Kirkdale Cave of those of the "last British Hyæna"—

Potent his jaw to crack his bony rapine;
Potent his stomach as a pot of Papin.

COLLAR-BONES OF THE TIGER.

By the kindness of a reader of "The Field," I received four little bones, described as the "floating bones" from the tiger's shoulders; my correspondent stated they were sent to him some years ago by an Officer of the Civil Service. The largest were taken from a very fine tiger. There can be no doubt whatever that these are the undeveloped clavicles or collar-bones of the animal, to

* See Dean Buckland's "Reliquiæ Diluvianæ."

which an allusion, as "floating bones," was made by Capt. Montgomery, in his interesting letter from India on the subject of tigers. The largest of these clavicles is but two and a quarter inches, and not quite half an inch in the distal extremity, which tapers almost to a point. I sent these little bones to the Royal College of Surgeons for comparison with the preparations in the museum, and the following was the answer received :—

Both the lion and tiger have the "clavicular bone," as so called by Professor Owen in the catalogues, and there is no doubt about the two bones you showed me being clavicular bones. The specimens of lion and tiger in the museum here have the bone on one side only; no doubt the other one was overlooked in the preparing them for maceration.

The bones are about as large, and somewhat of the shape, of the merrythought of a fowl. This merrythought of the bird is indeed nothing but a true clavicle. We find the clavicle fully developed in our species, where free use of the fore limbs is absolutely necessary for the existence of the creature. The tiger is an animal that uses his fore arms very frequently, and, as many of my readers know, sometimes to great effect; therefore he is provided with a clavicle, but, strange to say, nature has not developed it, except in a very minute degree. The tiger, I believe, is unable to climb trees, and I cannot help thinking that one of the reasons he cannot do this is that his clavicle is so exceedingly small

in proportion to his stupendous muscular development and the massive conformation of his bones.

In the books on natural history to which I have looked, with reference to the presence of collar-bones in the tiger, no mention whatever is made of the fact, except by Professor Bell, who, in his *Bridgewater Treatise on the Hand*, writes as follows: "There is also a certain degree of freedom in the anterior extremity of the cat, dog, marten, and bear; they strike with the paw, and rotate the wrist more or less extensively, and they have therefore a clavicle, though an imperfect one. In some of these, even in the lion, the bone which has the place of the clavicle is very imperfect indeed, and if attached to the shoulders it does not extend to the sternum; it is concealed in the flesh, and is like the mere rudiments of the bone; but however imperfect, it marks a correspondence in the bones of the shoulder to those of the arm and paw, and the extent of motion enjoyed."

EFFECTS OF VALERIAN ON TIGERS.

In "Land and Water," No. 14, April 28, 1866, my friend, E. Blyth, Esq., writes in reference to destroying the tigers which kill so many natives in Singapore:—

By experiments which I have tried, I have discovered that the feline genus generally is affected by the odour of valerian

even as is the common domestic cat. The essential oil of valerian affords the most convenient form of administering it. Now as a tiger usually returns to the carcase of an animal which it has killed, if too large to be carried off, what more easy than to drop a little oil of valerian about it, and for a gunner on the watch to take advantage of the beast when its attention is utterly absorbed in inhaling the odour which produces so singular an effect? I have witnessed this effect upon tigers to such an extent, that I am convinced they might be destroyed when in that delirious ecstasy with very little hazard. Let us hope that the experiment may be tried.

Mr. Austen having read this, at once put the experiment to the test, and reported as follows in "Land and Water":—

I have been enabled to try the effects of valerian on feline and other animals, and to compare the results produced. It appeared to have the strongest influence on the lion, tiger, and jaguar; these animals, when a drop was spilt on a piece of paper and placed in their cage, rolled over it in a state of the utmost apparent enjoyment, the males in *all* cases manifesting a stronger partiality than the opposite sex, and evincing the greatest recognition of its presence. The leopard, puma, and clouded tiger (*Felis macrocelis*) took less notice, and the cheetahs appeared to dislike the smell, their olfactory organs appearing in this way to resemble those of dogs, which dislike the scent of valerian as much as the true feline tribes enjoy it. The caracal and ocelots showed an especial liking, and were most demonstrative in their

manifestations of pleasure. I tried the effect subsequently on various species of bears, but without causing any material symptoms of excitement, though an Indian sloth bear waddled about at a great rate, and rubbed himself vigorously against the bars of his cage when he smelt it. A female skunk scuttled round and round and ran backwards in a most ludicrous manner, as soon as she perceived it, and judging from her demonstrations of joy, appeared to think it in some way akin to the natural perfume of her species. Domestic cats, as is well known, will break down and roll upon valerian plants in gardens, and a trap rubbed with a leaf or two will surely entice any luckless pussy who may pass that way. There is an old distich moreover in reference to planting it, which runs thus:—

If you sow it, the cat will know it ;
If you set it, the cat will eat it.

As this valerian plant appears to exercise such an influence over the naturally ferocious natures of the formidable tribe of cats, it might have a powerful effect in rendering lions and tigers docile in captivity, and would cause the position of a man entering their cage much safer than it sometimes appears to be.

FOXES.

WE are too much in the habit of hunting, shooting, destroying, or otherwise tormenting the living representatives of the fauns and satyrs of our woods, lanes, and hedges. How much greater would be the pleasure if we watched them a little more, and observed their instincts and their habits!

There are great disputes among philosophers as to the nice distinctions between reason and instinct. We want an animal Lavater, who, from the physiognomy of animals' faces, would tell us what kind of mind, whether ferocious, tameable, cunning, or stupid, the animal under examination *ought* to possess. This great philosopher has, indeed, made a few observations on the point. Thus, he remarks, "The skull of the dog speaks, as I may say, determinate powers of sense. The throat is rather that of tranquil than cruel or ravenous appetite, though it participates in both. I imagine I discover in the eye-bone and its relative proportion to the nose a degree of fidelity and sincerity. Though the difference between the wolf and the dog is small, still it is remark-

able. The concavity of the skull, the convexity above the eye-bones, the straight lines from thence to the nose, denote more hasty motion. The under jaw has likewise the stamp of malignity." Here, then, is a problem for the reader. Let him imagine himself in "Scholis mathematicis et physicis," at Oxford, with those fearful instruments of torture—two new pens, a sheet of unstained blotting-paper, and painfully blank sheets of foolscap—before him, the outer sheet being headed with questions such as follows:—

1. Describe accurately the physiognomy of the fox as compared to that of the laughing hyæna.

2. Compare the habits of the tame pet fox at New College with that of the fox which Jim Hills, of the Heythrop Hunt, lost at Tarwood.

3. Translate into Greek iambics *

When he got unto his den,
Where were his little cubs,
Eight, nine, ten.

* Since the first edition of this book was published, I have received from C. W. Goodhart, Esq., of 1 Chesham-road, Brighton, the following, which shows he has taken me at my word. The translation is very good, and I feel much obliged to him:—

Ἦ δ' ὅθιν ἀλώπηξ ἔντρον, ἀρχαῖον δόμον,
Εἰσῆλθ', ὅπου ἔτράφησαν, εὐφιλῇ βρέφει,
Ὅκτώ, πατρός τε δεκατὸν εὐρινος κάρα.
Κάκει, φαεινὸν ἐξαποσπάσας ξίφος,
Τὸν χῆνα χαίρων πάντ' ἐμίστυλλεν πατήρ.
Κάλλωπεκιδίων εὐθὺς ἐξ ὁμογλῶν
Οὐδεὶς ὅς οὐκ ἐμαρψεν ὅσπερ γνάθοις.

He cut up the goose
With his pocket-knife,
And the little ones scrambled
For the bones, oh !

4. Who was the author of the above poem ? and state your grounds for belief that the fox referred to resided in Bagley Wood, near Oxford.

5. State the arguments you would use to the Censor of Christ Church that a fox was not a dog, and that, therefore, the fines "for having a *dog* in your room" were not applicable to your fox.

6. Prove by the rules of Aristotle "that vulpicide is murder," and is punishable accordingly by the laws of Squirearchy.

7. Why do German students call a freshman a "fox?" What is the name of the plant that smells like a fox? Who was the Frenchman who hallooed the hounds to a squirrel?

8. Translate into Greek, after the manner of Herodotus, the following true and authentic story of the American fox-hunt, and state who you conceive to be the author of it:—

"A certain Jonathan being determined to open his public-house with a sensation scene, advertised that a fox-hunt would take place on the premises, and invited customers to bring their own hounds. They arrived accordingly in multitudes, and having performed libations of beer, proceeded to the sport. The fox was

forthwith let loose, seeing which, the customers also loosed their dogs, which were of divers sorts and colours. One of these, being a fierce and rabid animal, not knowing the cause of his liberation, attacked another dog, upon which the masters of the dogs, having wasted many words, set to fighting also. The others then seeing the tumult, also engaged in fight, and much was the blood that fell from their noses, and great was the darkness that suddenly overshadowed their eyes. The dogs, too; of the various combatants also immediately fought with bloodshed one against the other. The fox in the meantime, seeing this and being a tame fox, sought not to escape from his enemies, but sitting up on his haunches, a little distance off, witnessed the combat, and laughed heartily."

This account of the American fox-hunt I have from the highest authority, and it is worthy of record.

While the reader is answering these questions on paper, your humble servant will proceed to say somewhat about the animal itself. In the first place, it is not often easy to see a fox in his native covert, though you may know there are several about; failing this, good practice in observation may be obtained by examining his footprints, and concluding from their appearance what the fox has been about. In order to do this, soft mould or sand should be scattered about the place where the fox is likely to come, and you will thence

learn the difference between the track of a dog and of a fox. I shall here give the notes on this point of an observer, who wrote a valuable book, entitled the "Vermin Catcher," in 1768. He says:—

"It may not here be unnecessary to lay down some rules to distinguish the dog-fox from his wife, which may easily be done without seeing them, by adhering to the following observations:—A dog-fox has a larger foot than a vixen, and it much resembles that of a small lurcher-dog, and has often been mistaken for one by those who do not examine things minutely; but there is an essential difference, for the fox has hardly any ball to the heel of his foot, but the dog has a large one; and the female fox has likewise a small foot, with the ball thereof still considerably less than the male." Here, then, is a nice amusement for those who have the good fortune to live where foxes are about, and are willing to improve their woodcraft.*

It is not uncommon to hear of three-legged foxes

* In Boner's "Forest Creatures" (Longmans, 1861) will be found some admirable woodcuts representing the "slots" or footsteps of the stag, the hind, &c., when going at various paces. The science of Ichnology, or comparison of footsteps, I dearly love to study at the Zoological Gardens, early in the morning, when the snow has fallen. In his admirable pictures of animals, Reidinger generally gives at the bottom of the print drawings of the footsteps of animals when going at different paces. Thus, "Gefährt des flüchtigen Hirschen. Die Fährte eines trächtigen Thiers. Spur des Löwens."

being killed. The cause of the loss of the third foot is generally a trap, and I am convinced that the story of foxes gnawing off their foot is true. It may be urged that the pain of the self-amputation would prevent the fox from doing this; but it must be recollected that the trap, having cut off all circulation from the lower part of the foot, the latter would become dead, and numb to all feeling.

My friend, Mr. Bartlett, tells me a story relating to this point. He once had a fox consigned to him for stuffing, which had only three legs. When he sent the animal home, the gentleman to whom it belonged was much surprised to find the fox had four legs, and that the missing one had been restored. He asked Mr. Bartlett how this was, and he gave the following explanation. When he came to dissect the fox he examined the contents of his stomach, and found in it the missing foot, much gnawed by the teeth, but still perfect enough to enable him to prepare it and restore it to its proper position. It was quite evident that the fox had bitten his foot off, and, in his agony, had swallowed it.

A curious case of injury to a fox's leg was reported by myself in the "Field," in March 1863. Mr. E. Ward writes as follows:—

I send to the "Field" office, for Mr. Buckland's inspection two bones of a fox—the ulna and radius. Reynard's path through

life had evidently been anything but a smooth one ; but, being a remarkably fine fellow, I have him to stuff. These bones, which belong to the near side foreleg, appear to me to have been badly broken by the animal having become entangled by a fine snare, which was found on, and still surrounds, the bones. Reynard was also found, in the stripping off of his jacket, to have met with other dangers, there being a lot of shot lodged under the skin : but he seemed to have quite recovered, and, indeed, was in full condition, bearing no outward marks of having been in the wars with the exception of having a swelling near the carpal or wrist-bones, caused by the junction of the fracture of the two next them, which I have the pleasure of sending you, but which was not very perceptible with the fur on. After having met with these, and probably divers other narrow escapes of his life, he at last fell a victim to a more legitimate death by the noble sport of fox-hunting.—EDWIN WARD.

My report on the above specimen was as follows :—

“I am obliged to Mr. Ward for allowing me to inspect this interesting specimen. It is quite evident, in a medico-legal point of view, that the fox had been caught by the foot in a wire—probably a rabbit wire. I do not, however, think a positive fracture has taken place ; for, upon minute examination, the two bones underneath the swelling show no symptoms of a fracture. The appearance of this accident is, however, caused by a considerable effusion of bony matter round the part which has been so firmly compressed by the wire—the natural consequence of the inflammation of the periosteum surrounding the bone.”

It is wonderful how careless the generality of taxidermists are when they stuff a fox's head. They can,

indeed, but rarely restore the wonderful appearance of cunning to the fox, but they may, at any rate, give him a properly-shaped glass eye. In nine stuffed foxs' heads out of ten, the pupils of the eyes are made round like a dog's, and not elliptic like a cat's. The fact is, that a fox being a nocturnal animal, has a cat's eye, and not a dog's. This is a point which should be looked to. Again, it is curious to remark that a fox, when pleased, expresses his pleasure by wagging his brush, as a dog wags his tail.

The poor fox is not often on terms of friendship enough with mankind to show his pleasure; but still I have observed a fox wag his brush, and once only, and this at the Edinburgh Zoological Gardens.

Fox cubs are pretty little amusing things. A man who drove a Hansom cab about London used to have a handsome cub fox on the top of his cab, and the little fellow seemed quite at home up there. I was very sorry to hear the other day that this poor man was thrown off his cab coming from the Epsom races, and that both he and his fox were killed on the spot.

A great number of cub foxes are sold every spring at Leadenhall Market; they are imported from France and Germany, and sold to owners of packs of fox hounds. I have seen as many as twenty or thirty of them all huddled together in a big flat box. When the cover is opened, and one peeps into the box, it is most curious

to see all the beautiful little heads of the dear little cubs crowded together, and their lustrous diamond-like eyes staring at one.

I have lately heard of an ancient village dame who had a litter of cub foxes and a cow given under her charge, the whole produce of the milk of the cow to be devoted entirely to the cubs. Old Mrs. — was faithful to her charge, and got up at dawn to feed them every morning. She succeeded in rearing the whole number, and five out of the seven cubs were vixens. They were all turned down when they arrived at fox-hood ; but long before this time the worthy old dame began to complain. “ Lor, master, do’e be so good as to let them things go; they gets so tarnation big now that they fights and scratches like a lot of young fiends when I gives ’em their victuals; and they pretty nigh stinks me and my daughter out of house and home. Now, do’e, sir, let ’cm go, poor dears.” I need hardly say the old woman’s request was complied with, and the “ poor dears ” have long since done their foster-nurse credit by the excellent sport they have afforded before the hounds.

Ladies have, I believe, as a rule, a better chance than gentlemen of taming wild animals, as the following will prove. My excellent and kind-hearted friend, the late lamented Lady Hornby, told me that she once expressed a wish, when residing at Constantinople, to

try if she could tame a wild Turkish street dog, and asked some gentlemen to catch her one. They accordingly went out in pursuit, and in due course of time brought home their capture alive, half dead with fear, and as savage as possible.

The poor hunted thing immediately ran for protection to Lady Hornby, and would not quit her side. She tied it up in the stable, and by taking to it and feeding it herself, managed to make it quite tame. One day she was showing her pet to a gentleman who knows a good deal about animals.

When he saw it he said, "Why, Lady Hornby, what have you got here?"

"Oh, it's my tame street dog," was the answer.

"It's no street dog at all," said——; "it's a common brute of a wild jackal."

"Anyhow," said the lady, dog or jackal, I have tamed him now, and don't mean to part with him"—a plain proof to all that female influence can tame the most ferocious of animals.

Our friends should be very careful how they injure vixen foxes at the time they are likely to be in charge of cubs laid up. In April 1863, a "Warwickshire squire" kindly sent me seven dead fox cubs found in a pollard oak, wishing to know if I could ascertain the cause of death. They were exceedingly pretty little things, and at first sight might be taken for young black

and tan terrier pups. The eyes, of course, were closed ; but a touch of the knife soon opened the eyelids, and then they looked more like foxes. The tongues were enormous, compared to the size of the head, and the back part of the mouth and the sides of the upper jaws were beautifully adapted to hold on to the mother, reminding us somewhat of the arrangement of the palate and fauces as described by Professor Owen in the young of the kangaroo.

The first characteristic that struck me as common to them all, when placed in a row, was the fact that their mouths were dirty. Upon closer examination I found the tongues, the palates, and the back regions of their mouths, covered with "dirt." Upon examining this dirt under the microscope, I found it to be principally earth mould and decayed vegetable matter. I then opened them, and found that the lungs (the appearance of which, by the hydrostatic test, showed they had breathed air) and the rest of the internal organs were perfectly healthy ; the stomachs I found to contain portions of the same dirt as was in the mouths, and also a *very little* white-looking substance, which the microscope told me was milk, the milk globules being easily distinguishable. My idea upon the subject is, that these cubs were born alive and suckled by the mother ; she then, from some cause, was either driven away from them or else deserted them spontaneously ;

they remained alive as long as the milk in their stomachs would last them, and then, suffering from hunger and thirst, the poor little things crawled about the bottom of their nursery crying for their suppers, and licking up the material which composed the bottom of it. The verdict, therefore, is, in my humble opinion, "Died of hunger and thirst, not having access to the mother." I sent this family of cubs to be stuffed in a family group, with the label, "Babes in the Wood," to show how careful sportsmen ought to be of the mother foxes, and what mischief may ensue to their little families should the poor things anyhow be killed, either intentionally or by accident. After exhibition in "The Field" window, the group was sent back to the "Warwickshire Squire."

The sign of "The Fox" is not at all uncommon in country villages. At Steventon village, in Berkshire, which formerly was the nearest station on the Great Western Railway to Oxford (before Didcot Station was built), there is a "Fox" public house; and many a time I have had a glass of ale there in my younger days, when acting as whipper-in to the Berkshire fox hounds, of which my late uncle, Thomas Thornhill Morland, of Sheepstead, near Abingdon, was formerly the master. The inscription on the signboard of the "Fox" runs (if my memory serves me) thus—

I am a Fox, you plainly see,
 No harm you can derive from me,
 My master he confines me here,
 Because I know he sells good beer.

Having published the above in "The Queen" newspaper, Cuthbert Bede was good enough to send the following communication:—

"Perhaps the four lines of doggerel mentioned by Mr. Buckland are to be met with in various parts of England; for, in 1851, I saw them on a signboard in the village of Folkesworth, near Stilton, Huntingdonshire, and then copied them, and sent them to the "Illustrated London News," where they were published, Dec. 27, 1851 (vol. xix. p. 783). As they vary from the lines given by Mr. Buckland, and are also a remarkable specimen of rustic orthography, they may be worthy of preservation in your pages. A rude figure of a fox was painted on the upper portion of the sign, underneath which appeared these lines, here copied *verbatim et literatim*:—

I . HAM . A . CUNEN . FOX .
 YOU . SEE . THER . HIS .
 NO . HARME . ATCHED .
 TO . ME . IT . IS . MY . MRS .
 WISH . TO . PLACE . ME .
 HERE . TO . LET . YOU . NO .
 HE . SELS . GOOD . BEERE .

"This inscription, being translated, would read as follows:—

I am a cunning fox, you see ;
There is no harm attached to me ;
It is my master's wish to place me here,
To let you know he sells good beer.

" The signboard with this inscription had been there since the earliest memory of the oldest inhabitant ; but within these few years the inscription has been painted over. Folkesworth village lies in the midst of the Fitzwilliam Hunt."

From that interesting book, " The History of Sign Boards," &c. &c.,* we learnt that formerly there used to be a sign of the " Three Foxes," in Clement's Lane, Lombard Street, carved in stone, representing three foxes sitting in a row ; but a few years ago the house came into the possession of a legal firm, who, no doubt afraid of the jokes to which the sign might lead, thought it advisable to do away with the carving, by covering it over with plaster. We also read of the following signs : Fox and Goose, Fox and Duck, Sheffield ; Fox and Hen, Long Itchington ; Fox and Lamb, Newcastle ; Fox and Grapes, Fox and Crane, Fox and Hounds, Fox and Owl, Nottingham ; Fox and Bull, Knightsbridge ; Fox and Cap, Smithfield ; Fox and Crown, Newark and Nottingham ; Fox and Knot, Snow Hill ; and the Flying Fox, Colchester ; &c. &c.

The days of animal worship are, to a certain extent,

* By Jacob Larwood and John Camden Hotton. Published by J. E. Hotton, Piccadilly, 1866.

gone and past, but there are still many nations upon the earth who keep up the custom with all due honours and observances, and among these may be included English men and women. It will be immediately asked what animal do *we* worship? The future historian of our age will (if he be jocosely inclined) be able to state, with all truth, that the English people of the nineteenth century worshipped the fox. In the eyes of most of our country squires his life is regarded as sacred, and his death by violence (other than in the hunting field) simply murder.

What are the high festivals in the country so often dedicated to? The fox, and nothing but the fox. We have our social *réunions* at the cover side; we have our hunt breakfasts, our hunt dinners, and our hunt suppers; and even here in London we have our "Fox" Club.

The brush of the fox* is preserved as a trophy of prowess in the hunting field. "The deep deep draught

* Mr. Edwin Ward, taxidermist, of 24 Wigmore Street, Cavendish Square, has shown me a novel and peculiarly ornamental method of mounting foxes' brushes. He has discovered that without injury to the bushy character of the brush, and without cutting the brush or introducing any foreign fur or material into it, no less a number than fifteen distinctly-marked rings of alternate red and white may be produced in the process of mounting a fox's brush. This gives the brush the appearance of belonging to a new and extraordinary species of fox, and at the same time is pretty in appearance.

of the good Rhine wine" is quaffed from his silver-mounted skull, and his image is made in gold and silver to adorn our dinner tables.

In country villages in hunting counties, as evening draws on, the orgies of fox worship are celebrated by copious libations of beer poured down the throats of those interested in his welfare, and by incantations, partly melodious, but mostly vociferous.

In higher circles wine is used in the invocations to "the God Fox;" and there is a story on record, that a certain Head of Balliol College, Oxford, who understanding not the meaning of terms used by certain young fox-worshippers in one of their midnight celebrations, was much alarmed at being wakened at midnight by a most unusual uproar.

The next morning he sent for the whole party, and when they were all arranged in a row in the terrible study (the execution-room of so many delinquents), the worthy Don thus addressed them:—

"Gentlemen, I understand that last night you were holding an uproarious fox-hunting supper. You may be aware that the pursuit of the fox, either by dog or gun, is contrary to the statutes of the University.*

* "*Statutum est quod scholares abstineant a venatione ferarum cum canibus cujuscunque generis, viverris, retibus aut plagis; necnon ab omni apparatu et gestatione bombardarum et arcubalarum sive etiam accipitrum usu ad aucupium.*"—*University Statutes.*

"I heard from my windows, at midnight, many unacademical expressions, new and strange to my ears, frequently made use of by you: and, among them, I heard the words 'gone away,' 'gone away,' frequently and distinctly repeated; these words being in every case followed by the most tumultuous applause.

"Now before I set you the impositions which you will of course receive, and which you really deserve, I must really beg to ask you, collectively and individually, to what member of this college you intended to apply the words 'gone away;' and insist upon your immediately informing me *who has dared to leave the college without my express permission in writing?*"

There is a story told of this dear old Don, alas! no longer among us, who was master of Balliol College, Oxford. He was returning one day from his constitutional ride on his quiet old cob along the Abingdon road. When he came to the turnpike he felt in his pocket for some money. Alas! he had none.

"My good man," said he, "I am Master of Balliol College, and you must let me pass."

"I don't care," was the man's reply, "what you be master of; you ain't master of twopence, and you can't go through *my* gate."

And at the turnpike gate the old gentleman remained sitting on his cob till some of the very undergraduates who had lately received a jobation for fox-hunting

came up dressed in their red coats, and paid the twopence for their worthy Master. The undergraduates were rather frightened when they first saw the Master, as it were, lying in wait for them, but in his pecuniary difficulties, he dispelled their fears by exclaiming, "I don't see you, gentlemen, I don't see you."

MY ADVENTURES AND JOURNEYS WITH PORPOISES.

ON Thursday morning, November 27, 1862, Mr. Bartlett sent a messenger to the 2nd Life Guards' Barracks, Regent's Park, to say that he had just received a live porpoise.

I immediately went over to the Zoological Gardens, and found the poor beast placed in a tank of sea-water behind the aquarium-house.

I at once perceived that the porpoise was "very bad." He was upon his side—every now and then turning up his whitewaistcoat-like under side. His breathing, or rather blowing, was hard and laboured, and his wonderfully-constructed "blow-hole" at the top of his head was working with difficulty. I counted his respirations, which were eight in the minute, loud and powerful (especially the expirations), reminding one of a man snoring heavily.

It was quite evident that this porpoise was in a very exhausted state, and I could not help reasoning thus:—Here we have an animal with a four-cavities heart,

warm-blooded, and provided with air-breathing lungs ; his system is exhausted, and he feels faint.

Reasoning thus, I could not but advise stimulants, as with a human being; and, having gained the permission of Mr. Bartlett, we agreed to give the porpoise a dose of ammonia, but how to do it was the question. There was only one way ; so I braved the cold water and jumped into the tank with the porpoise. I then held him up in my arms (he was very heavy), and, when I had got him in a favourable position, I poured a good dose of sal-volatile and water down his throat with a bottle.*

This treatment I really think had some salutary effect, for his respirations, which when I first saw him were eight in the minute, increased to ten, and then to twelve.

In two hours' time I paid him a second visit, and again going into the water, lifted the poor beast up as well as I could, while Mr. Bartlett poured down his throat a good glass of stiff brandy and water. Again the results were good ; the respirations increased to thirteen a minute.

Perceiving that the water in which he was floating was stained with blood, I examined him all over, and

* I used a bottle because I could get the stimulant well down into the pharynx (the back part of the throat), and the glass was strong enough not to break if he bit at it.—See Engraving.



THE PORPOISE.

found a wound in his tail which had begun to bleed. This I soon stopped with common salt. The bones of his left fin were also fractured.

Seeing that the porpoise did not get much better, Mr. Bartlett and myself agreed to give him another chance; so we fished him out of his tank, and carried him quickly to the seal's pond, and put him carefully and gently into the water. In about an hour he got decidedly better, and of his own accord swam twice across the pond, using his tail with the peculiar motion found only in the whale tribe.* He was, however,

* *Porpoises at Play.*—A fish, such as a salmon or trout, propels himself by means of horizontal movements of the tail. A whale's tail is put on at right angles to his body—a wonderful provision to enable him to swim with ease, and yet come quickly to the surface to breathe. The motions of porpoises at liberty in the sea are very different from those of our poor blind prisoners. One fine day in September, when at Herne Bay looking after oyster cultivation, I fancied I saw a splash as of something heavy falling into the water at a considerable distance out at sea. Thinking that it was a gull dashing into the water, I took up my opera-glasses to watch; I then saw a sight which gave me more pleasure than any operatic scene upon which the glasses aforesaid could be brought to bear, viz. some six or eight porpoises at play. They were going steadily on a N.E. course from the pier-head, and I fancy were at play, and not feeding. About three times in a minute, they sprang to a good height right out of the water, and projecting themselves forward described a perfect bow in the air. Of course I could not tell the distance they jumped, but judging from the time the animal was in the air, the leap would not have done discredit to any hunter with a character for brook-jumping. The sun shone

very blind and stupid ; for he invariably hit his nose against the edge of the pond.

I was curious to take the temperature of this cetacean breath, for it felt warm to the hand as it came out of the blow-hole in a jet, striking the hand like a jet of steam from a kettle. I found the temperature of the porpoise's breath to be about 53° Fahrenheit.

There were only two objectors to the porpoise being placed in the seal-pond, and these were "Kate" and "Tom," the two seals, the rightful inhabitants thereof. It was most absurd to see them bolt away, under water, in the greatest alarm, to the further end of the pond, turn suddenly round, and stare up at the poor sick porpoise with their huge eyes and their nostrils distended to twice their size ; and then down again they went in an instant, plunging under their house, shortly to reappear and have another long and frightened stare at the intruder.

As I feared, this poor porpoise, who had been caught at Brighton, and allowed, unfortunately, to spend several

bright at the time, and the white skin on the lower two-thirds of the porpoise's rounded carcass, shone like a silver spinning-bait. Sometimes two or three porpoises were in the air at the same time, and, as far as I could make out, there were young ones among the party ; at all events there were big ones and little ones ; the big porpoises were probably giving their children a lesson in jumping. This flock of Proteus' sheep were still keeping up their game of leap-frog when they got so far out to sea that I could observe them no more.

hours panting on a fishmonger's slab in Bond-street, died, after all, in spite of our efforts to save him. Two days after his arrival at the gardens the poor brute was found dead on the top of the seal-pond and the seals sang pæans.

Mr. Bartlett immediately handed him over to my tender mercies, with a request that I would hold an inquest and report upon the matter at the next meeting of the Zoological Society. Accordingly, having made a dissection of his huge, pig-like carcass, I found quite sufficient cause of death to kill any creature, marine or terrestrial, even though he had been treated with ammonia and glasses innumerable of brandy and water. The fishermen who had caught him had kindly given their victim a gentle reminder by means of a tap on the side of the head, which had left a considerable bruise; and they had also (I was shocked to find) acted very cruelly towards the poor prisoner. It was with difficulty that I could find his eyes. At last I discovered them deeply sunk in their sockets, and perceived that they had been wounded; the cornea of both eyes, in fact, had been cut or torn across by (I should say, from the appearance of the wound) some rude pointed instrument, such as a nail or bit of wire. Not only were the coats of the eye thus lacerated, but on passing a probe into the wound and searching for the lens of the eye, it

was nowhere to be found; it had probably escaped through the aperture of the wound.

I have since learned that it is the custom of fishermen, in some parts of England, when they catch a shark, dog-fish, grampus, porpoise, or other enemy who is apt to damage their nets, to put the poor beast's eyes out. I trust, however, this custom is not universally prevalent among our fishermen. It is an un-English action; and, if they were spoken to quietly and properly on the subject, I am sure these poor but honest fellows would leave off this horrid, cruel custom, which I dare say owes its origin to some queer tradition, or piece of folk lore, but it is none the less cruel for that.

Information was, however, obtained from our experiences with this porpoise which may be expressed in the following formula. A living porpoise may travel many miles by railway, with no water, and be sold at Billingsgate; may puff and blow for many hours on a marble slab in Bond Street; may spend a night in some sea-water made by a chemist according to human formula, and not fresh from Nature's own laboratory; may ride in a cart to the Zoological Gardens; may bleed profusely from wounds received on his fins and tail; may receive a scalp wound on the head, and have his eyes put out, and yet survive for many hours.

Mr. Bartlett and myself therefore conceived the greatest hopes that, by perseverance, we should one

day be enabled to get a live "sea-pig" to the Gardens. I consequently wrote to friends at the sea-side, and at the same time put notices in the "public journals" to request those who had the opportunity would secure a live porpoise, and Mr. Bartlett or myself would come and fetch it up to London.

In answer to one of my letters I received a communication from Mr. Briscoe, of Southsea, who told me that he had placed up on the sea-shore, near Portsmouth, the following :—

NOTICE TO SICK PORPOISES.

If Visiting this Beach,
their carriage to London will be paid.
A DOCTOR will be in attendance, and MEDICINE,
in the shape of
No end of Grog, will be found.
Please land early.

Apply to

FRANK T. BUCKLAND,

Regent's Park Barracks.

2nd Life Guards.

Unfortunately, no porpoise availed himself of the above advantages; but I received from some kind poet the following neat distich :—

PORCULUS MARINIS E PROFUNDIS.

Who brought me from the briny wave?
Who with his kindness killed my corpus?
Who found me a fresh-water grave,
And popped me into it? poor porpoise!

Quis me marinis fluctibus abstulit?
 Vita quis almis artibus expulit?
 Quis porculo ponti salini
 Hoc fluviale dedit sepulchrum?

Who stuffed me with his bits of fat?
 And standing where the eider-duck land,
 Who tantalised me with a sprat?
 Who cut me open, eh? F—k!

Quis mi refersit corpora pinguibus
 Frustis? quis ora stans anatoriâ
 Spe piscis emovit recessu?
 Viscera quis patefecit? Idem!

We had to wait for a porpoise till March the following year, when, on the 14th, I received a telegram from Mr. Dutton, of Eastbourne (who had kindly been looking out for me for some time), that a live porpoise was waiting my arrival on the Brighton beach.

I went down to fetch him for the Zoological Gardens, but—

When I got there,
 The beach was bare,
 And, lo! the poor porpoise was dead.

It appears that the fishermen had seen the reward of 2*l.* offered for a live specimen, and had caught one on Thursday morning in a seine-net, with considerable difficulty. They placed him in a boat which they filled

with sea-water. He was alive on Thursday night at 12 P.M., but was dead on Friday morning. The men thought some mischievous person had killed him by placing the finger in the blow-hole. So I returned to London sad and porpoiseless.

The third porpoise arrived at the Gardens in October following. On hearing of his arrival, I forthwith hastened to pay my respects. I found our new specimen (about 4 feet long and 33 inches round the chest) in the pond with the sturgeon. The sturgeon seemed terribly jealous of the porpoise being put into *his* pond, and swam about the bottom, and round and round, looking as savage as a fish *can* look. He kept at a safe distance from the intruder into his rightful domain; and when the porpoise was at one side of the pond, you might be quite certain that the sturgeon was at exactly the opposite point in the circle. I expect the poor sturgeon was troubled not only by his visitor flopping round and round like a horse in a mill, and disturbing the water all day with his rudder-like tail, but that he was kept awake at night by the snoring of the porpoise; for if his marine visitor made such a noise breathing in the ordinary way during the daytime, what must have been the frightful consequence of his stertorous breathing at night?

This porpoise was much fatigued by his journey. He left Boston, in Lincolnshire, at 7 A.M. in a

railway train, and he had, on arrival, been nearly eight hours out of water.

Mr. James Martin, of Wigtoff, near Boston, sent him down, carefully wrapped up in a wet blanket and surrounded with wet grass. Plenty of water was also sent, and this was from time to time poured on his back, to keep his skin and blow-holes moist.

When placed in the pond, he sailed round and round the *margin*, with his head half out of water. Mr. Bartlett thought he did this because he was in a strange place, just as a wild bird or beast, when fresh caught, beats himself against the bars of his cage.

We hoped that the porpoise would soon find out that he had come into the hands of friends, and that he would be well treated; and we trusted that in a day or two he would begin to feed, and take example from the good behaviour of his comrade the sturgeon.

The respirations, or blowings, of this porpoise were something between a cough and a sneeze; elegantly described by a cabman as "one cold caught on the top of t'other." The jet of air he sent forth from his blow-hole, as in the first porpoise, felt warm to the hand.

I had, however, only one fear—the porpoise did not open his eyes once all the time I was looking at him; otherwise, he seemed in perfect health; but we did not like to bother and disturb him by examining them.

I wrote a short notice in the "Times" to call the attention of the public to this porpoise in the sturgeon's pond, thinking that there was a good chance of his living.

It seems a very curious thing, but *it is a fact* that all the live porpoises that we have had at the Gardens have done very well, and shown every possible sign of good health and longevity *till* I wrote to the "Times" to give notice to the public of their arrival. The notice *being published*, the various porpoises have invariably had their spite out against me by dying *immediately*, and this without due notice to their lawful proprietors—a most unwarrantable act on the part of beasts about whose well-being we all cared so much and took so much trouble.

This third porpoise (from Lincolnshire) was no exception to the above rule, for he lived several days, and then immediately he was announced in the "fashionable arrivals" columns in the daily papers he died forthwith, and thus disappointed many a visitor who came expressly to the Gardens to see him.

Among the disappointed visitors was the late lamented Mr. Thackeray, who in "Punch"* a few days afterwards published the following admirable

* See "Punch," October 31, 1863. Thence copied into the "Times."

ELEGY ON THE PORPOISE.

BY THE STURGEON.

Dead is he ? Yes, and wasn't I glad when they carried
away his corpus ;

A great, black, oily, wallowing, wallopping, plunging,
ponderous porpus.

What call had Mr. Frank Buckland, which I don't
deny his kindness,

To take and shove into my basin a porpoise troubled
with blindness ?

I think it was like his impudence, and p'raps a little
beyond,

To poke a blundering brute like that in a gentlefish's
private pond

Did he know as I am the king of fish, and written
down in histories

As meat for his master, that is to say, for Victoria the
Queen, his mistress ?

And, if right was done, I shouldn't be here, but be
sent in a water parcel

To swim about in a marble tank in the gardings of
Windsor Castle.

And them as forgets the laws of the land which is
made to rule and control,

And keeps a royal fish to themselves, may find them-
selves in a hole.

Is a king like me, I humbly ask, to be put in a
trumpery puddle,

For Fellows to walk about and spy, and talk Zoolo-
gical muddle?

And swells to come for a Sunday lounge, with French,
Italians, and Germans,

Which would better become to stop at home and
think of the morning sermons.

And then of a Monday to be used in a more obnoxious
manner—

Stared at by rags and tags, and bobtails as all come
in for a tanner.

And me, the king of fish, indeed, which it's treating
china like delf,

Mr. Kingfisher Buckland, Sir, I think, you might be
ashamed of yourself.

And then I can't be left alone, but you come and
stick in a big

Blind, blustering, snorting, oily beast, which is only an
old sea pig.

I'm heartily glad he's dead, the pig; I was pleased to
my very marrow,

To see the keeper wheel him away in that dirty old
garding barrow.

And thought it was not flattering, last Sunday as ever
were,

To hear the swells as had read the "Times" come
rushing up for a stare,

And crying bother the Sturgeon, it's the Porpus I
want to see,

And going away in a state of huff, because there was
only *me*.

It was pleasant (and kings have right divine to feel a
little malicious)

To see 'em sent to behold his cops in the barrow
behind the fish-house.

So when Mr. Buckland next obtains a porpoise as
wants a surgeon,

Perhaps he wont insert that pig beside of a royal
sturgeon.

I've heard the tench is a cunning fish, and effects a
perfect cure

Of other fish put into his pond, which he's welcome
to do I'm sure ;

But don't bring sick porpoises up to me, I'm kin to
the old sea devil,

And though a king, I'm not inclined to be touching
fish for the evil.

Besides, a porpus isn't a fish, but a highly-developed
man—

Improved, of course, with a tail and fins, on the famous
Westiges plan—

The Phocænor Rondoletii, though his scent in sultry
weather

Was not like Rondoletia nor Frangipanni neither ;
But that is neither here nor there, and, as I previously
said,
From the bottom of both my heart and pond, I'm glad
the porpoise is dead.

THE STURGEON.

Royal Zoological Gardens.

The elegy quoted above did our porpoise cause an immense amount of good, for it caused residents at the seaside to be quite anxious to get a live specimen for us, and both Mr. Bartlett and myself held ourselves in readiness to start at any moment to any place at a reasonable distance in the United Kingdom, if only we could be certain of our object, viz. a live porpoise for the Gardens.

At last one morning, while sitting at breakfast, Mr. Bartlett rushed in with a telegram in his hand. "Read that," said he. I seized the paper and read :—"From —, Blackpool, Lancashire, to A. D. Bartlett, Esq., Zoological Gardens. How much will you give for a young, live spouting whale, uninjured?"

"What's to be done?" said I; "it's a grand chance this; but let us examine the message again." "Well," said Mr. Bartlett, "I will go if you will." So we looked at the big map of England and the "A B C," and from these we learnt that Blackpool was some 228 miles from London. Nevertheless, we sent for a cab,

and in a few minutes were dashing away northwards in the express from Euston Square.

"I wonder how big this whale is," said I. "How in the world are we to bring him home?" said Bartlett; "we have got a famous whale-pond at the Gardens, and we are promised a Beluga, or white whale, from America." (See Appendix for account of tame whale and dolphin at Boston, America.) "I should be glad if we could get one before Mr. Barnum could send us over a Yankee whale." "I think we had better bring him home in the steamboat from Liverpool," said I; but it is a longish voyage, as I see from Bradshaw, of something like ninety hours. I think we must risk the train, and travel by night, for the sake of coolness. Where shall we get the proper supply of water for the journey? I wonder if anybody will insure the whale's life before we start," &c.

With such speculations as these, we whirled away through the air, and in the evening, after a long journey, we arrived at Blackpool. We at once inquired anxiously about the whale that was to be seen. "Whale, sir? I aint heard nought about t'whale." So, ascertaining that the sender of the telegram lived some three or four miles off, we began to seek for the whale up and down the town for ourselves.

Passing by the bath-house on the seashore, we saw a crowd at the door. "That must be the whale," said

I; "they would be sure to put him into a bath when they caught him, and the people are crowding to see him." So we came to the door, where a loud voice was shouting, "The cub whale, caught yesterday! The whale, the cub whale to be seen alive—alive! Sound the gong, Jim. Walk up, walk up! Only twopence to see the monster of the deep!" We elbowed our way through the crowd along a passage to a bath-room; and when we got in, after much pushing, we saw a *poor little baby porpoise*, about two and a half feet long, floating at the top of the water, every now and then showing the white side of his body, and three parts dead. "What a sell!" said Bartlett. "What a sell!" said I, So we got into the open air, threw up our hats, lay "supine" (like the bad shepherd in the Latin grammar) on the shingle, and laughed at each other for five minutes, that we, the porpoise hunters, should have come over 200 miles to see such a wretched creature as this showman's whale.

So we went back to town again, crest-fallen; still, however, determined, though we had been made fools of by this our fourth porpoise, never to give up our idea.

The fifth porpoise was a little wretch, exactly like the "Blackpool cub whale," a young sucker; and finding that it would suck his finger, Mr. Bartlett sent for a baby's feeding-bottle with a teat to it, and placed

it in the young thing's mouth. He began to suck away famously, and in a short time swallowed over a pint of cow's milk. When the keeper came to feed his charge next morning, he found it at the bottom of the bath, quite dead; the probable cause of death being, possibly, that nobody had sat up all night with it to keep the tender infant duly supplied with food.*

* Mr. Dilnot, of Hampton, made capital boot-laces from the skin of this young porpoise. In September 1859, one Judy Downs, owner of a fishery weir at Hampton, near Herne Bay, caught a young porpoise in his weir: the creature was in perfect health, and quite uninjured. The old man, I regret to say, killed him for the sake of "his 'ile," he "stuck him with his big knife in the throat, and he bled like a pig." I gave Judy a good scolding for not letting me know of his capture, as I am contemplating another experiment—turning out a porpoise in a large sheet of water not very far from Charing Cross. The place is all ready, and there are plenty of fish for him to eat, and in July 1867, Mr. Blackwell, of Shoeburyness, kindly informed me that a porpoise with young was a prisoner in a large salt-water pond. Before I could get down to examine it, I received the following sad intelligence:—

SIR,—I am sorry to inform you that the porpoise is dead. At night a coastguard man heard it groaning in the shallow part of the pond, but it went off into deep water on his approach. In the morning it was found dead, with a deep wound in the large vessels of the neck. There was a quantity of blood on the sand and in the water, so the wound must have been inflicted during the animal's life. I imagine the poor brute came on to the shallow to bring forth its young, and that some brute speared it there early in the morning. It was opened, and the young one found dead inside. It was about two feet six inches long. It is

At length we received news of our sixth porpoise, and the following events took place :—

Late on the evening of Nov. 22, 1863, I received a telegram from John Minter, Esq., Folkestone, stating that he had obtained a live porpoise, which was quite at my service for the Zoological Society. I went down by a fast train early on Monday morning to Folkestone, fully determined to try my very best to bring the creature alive to London.

On my arrival at Folkestone I was welcomed by J. Minter, Esq., and by W. Earnshaw, Esq., who had kindly built a tank for the porpoise, filled it with seawater, and deposited him therein with a sentry to keep watch and guard, and supply fresh water continually, till such time as I should arrive to take him away to London.

I at once saw that it was a very fine beast (not a fish, recollect), and seemed in a pretty good state of health, or, as Hall, the man who caught him in his sprat net, said, "Look at him, sir, he is as nice a young fish as ever came out of the sea—only just watch his hactions, sir, he is as cheerful as a kitten; I think he is *more*

a great pity, as such a chance may never occur again.—W. BLACKWELL.

In the museum at Newcastle there is a very nice specimen of a foetal porpoise, and also of a little whale, a true whalebone whale—a most lovely specimen.

frolicsome since he has been in the tank than he was when I first caught him in my sprat net. Live out of water, sir ? in course he will ; I only wish I could live as long *under* the water as yon fellow can live out of it in the air—wish you luck with him ! The London folks don't often see such a beautiful beast as that, sir."

Looking pretty close at the water in the tank, I observed that even though it had been frequently changed it had a blood-red tinge about it ; so I lifted up the porpoise out of the water, and saw at once that he had rubbed the bark of the tip of his lower jaw, and that it was bleeding away just like a man's chin bleeds when he has cut himself in shaving.

"This hæmorrhage will weaken the beast," thought I ; "*it must* be stopped." So I ran off to a chemist's shop, and got a pennyworth of stick-caustic or nitrate of silver, and, lifting the porpoise's head gently out of the water, applied the caustic freely to the wound. The smarting of the caustic made the porpoise waggle his tail briskly, like a duck just come out of the water on to the edge of a pond : but the bleeding at once stopped then and there, and this was what I wanted.

Knowing that it was not advisable to take the porpoise to London in a tank containing water, because the water splashes down the blow-hole and has a tendency to

choke him, Mr. Earnshaw, at my request, kindly ordered his carpenter to knock up a rough box, which, by the way, when finished, looked amazingly like a coffin, and we brought it down to the place where the porpoise was blowing away like a steamboat ready to start. We then wetted some blankets with sea-water, obtained a huge can of sea-water and a big sponge, and we were all ready for the start.

A few minutes before the train left the station we hoisted, with the aid of a number of fishermen, the porpoise bodily out of the tank, put him on the blankets in his box, and trundled him off to a fish truck in the station.* Mr. Barnett had provided us with a guard's van, and in we bundled Tennant, myself, and the porpoise. I sat at the end of the box, close to the sea-water tank, so as to have good command of our sea pig; and lucky it was I did so, for soon after the train started the porpoise was "taken worse," and began to breathe very hard. I at once saw the cause, the delicate membranes composing his blow-hole were getting dry, and would not close properly,† so I set to work with the sponge, and the whole way up to London kept on perpetually wiping and sponging the beast's nose

* I must here return my thanks to Mr. Barnett, the station master at Folkestone, who gave me and Tennant, the keeper from the Zoological Gardens, who was sent with me to assist in the operations, every facility to take care of our precious charge.

† See Appendix, Anatomy of Porpoises.

and body with the wet sponge, so anxious was I that he should live.

The train went very fast ; and in order that the porpoise should have all the air possible, I opened all the windows and shutters I could get at so that there was a perfect hurricane blowing through the van where we three—happy trio—were ensconced in the semi-darkness, having only my little hand-lamp, which I always carry when likely to have to travel by railway at night. This letting in the draught was evidently a good plan for every part of the journey, save and except the long tunnels.

When we got into these, the steam and smoke from the engine came in through the open windows, got down into the porpoise's blow-hole, and made him snort and sneeze to such a degree, that I became positively alarmed for his life. His respirations increased from nine to fifteen in a minute, and I thought he was going to die then and there. Once out of the tunnel, he got better again, and the faster the train went the better the porpoise seemed to breathe. He had doubtless never travelled so fast before in his life, even though he can swim at the bows of an ocean steamer going at her full speed.

In about two hours and a-half we ran into the London Bridge Station, and right glad I was, for I was tired enough, sponging and watching the creature so

incessantly. Mr. Bartlett had sent a light cart with a fast trotting horse for us; we therefore whipped the porpoise, box and all, into the cart, and away we went through the London streets like a fire-engine going to a fire. When we got to Cumberland Market, Regent's Park, I was lighting my pipe, when I dropped by accident, a vesuvian on the porpoise's back; this made him jump up and roll round in his wooden cage like a "jack-in-the box." "He's a-going, sir! he's a-going!" said the driver. "No, he is not a-going," said I. "You go along smartly with the cart, and attend to the horse; leave the porpoise to me. You have not got many yards to go now."

Arrived at the Zoological Gardens, we drove straight to the reservoir, where the water was deeper than the sturgeon's pond—we did not want another poetical jobation in the columns of "Punch" and the "Times" from the royal fish for intruding on his privacy. The big reservoir would be a much better place, we thought, and so we drove the cart as near as we could to its edge. We then lifted out our porpoise—he was "very bad," and breathing much too fast to please me: we carried him up the reservoir, Bartlett at his head and I at his tail, and let him slip slowly down the bank, tail foremost, into the water. It was pitch dark, and I could hardly see what I was about. The mud was up to one's knees, and it was raining hard and very

cold. I knew, however, by the splash that the porpoise was all right in the water. We then sat down and watched our friend by the help of the policeman's lantern, and in about half an hour he seemed so much better (though occasionally turning over and showing his white sides), that we went away to bed quite tired out.

The next morning I was much pleased to hear that our porpoise was doing very well, and seemed better. Both Mr. Bartlett and I agreed that he was weak from want of food, but how to feed him was the difficulty. Mr. Bartlett suggested a fish tied by string to a pole. I, immediately acting on this idea, sent for my jack trolling-rod, line, and spinning-tackle, then, taking a fresh herring tied it by the tail to a fine bit of thin silk, and attached the other end of the silk to the spinning-tackle—of course without any hooks. I then judiciously spun the herring right in front of the porpoise's nose. To our great delight, he took it in a moment, with a snap like a jack, and sailed away with it in his mouth. I gave him plenty of line (as in gorge-bait fishing for jack), and he ran it out famously. I gave him some three or four minutes' time, and then jerked suddenly upon the line. Mr. Bartlett's plan acted admirably, and just as we wanted it to act, for the silk broke short off, and the herring remained in the porpoise's mouth. The porpoise then chumped and gnawed at the fish but could not swallow it, he was

too weak to get it down, and dropped it to the bottom of the pond. We then cut a smaller bit of herring; he attempted to gorge this also, but, as with the larger fish, he could not swallow, and dropped even this little bit. We then tried with a small live carp, which we tied with thin silk on by the tail in the same way as the herring. Strange to say, he would not attempt to bite at the carp, as though he knew it was not a salt-water, but a fresh-water fish and “no good” to him.

The porpoise took seven or eight baits of different kinds from us in this way, but not one would he *swallow*; he dropped them all after munching them a bit between his teeth. Upon consultation, therefore, we determined, that as the beast was too weak to swallow of its own accord, that we would help him; so I got down by a ladder into the reservoir, and, catching the porpoise by the fin as he passed, watched my opportunity, and pushed a herring with my hand right down into his stomach; he scored my hand with his teeth, but I did not care about that. For a minute or two after I had given him the herring he seemed better, but he very soon showed that his supper did not agree with him, for he began to flutter his tail and dance about at the top of the water.

After sundry efforts, he made a spring, spat up the herring, and then—ungrateful wretch! after all the trouble and labour we had bestowed upon him, turned

up his fins and died right off. The cause of his death was, I believe, the herring sticking in his throat as he ejected it from his stomach, and so suffocating him. If he had left it in his stomach where I put it I don't think he would have died.

Dr. Sclater, Mr. Bartlett, and myself, were all, of course, very sorry that this porpoise should so suddenly have taken leave of us in this offhand manner. Nevertheless, we intend to persevere, and have a live porpoise one of these days at the Gardens. We have now gained many minor experiences, and the proper food of these curious water mammalia, and we intend to persevere till we succeed, for we now know perfectly how the transport is to be managed.

The events described above in the transport of this porpoise to London were, shortly afterwards, put (unknown to myself) into verse by a friend, Edward Ryley, Esq., of Leatherhead; and one Saturday morning I was much astonished and amused to find in the columns of "The Field" the following lines, which I trust will amuse the reader as much as they did myself:—

FRANK BUCKLAND'S PORPOISE.

Air—"The King of the Cannibal Islands."

Oh! have you heard the news of late,
About a mighty fish so great?

If you've not 'tis in my pate—

Why Buckland's got a Porpoise!
The telegraph a message bore
From Messrs. Minter and Earnshaw,
Which duly reached Frank Buckland's door
From Folkestone—"We've a fish on shore!"
So off on Monday morning set
Frank Buckland and Signor Bartlett,
That they, if possible, might get

Alive—Frank Buckland's Porpoise.
Fishery, fleshery, fowlery, jig,
Rum-tum-toodlum, little or big,
For whether a moa, a porpoise, or pig,
'Tis all the same to Buckland.

Arrived at Folkestone, in a tank
They found Sir Porpoise, lean and lank,
But still alive—how glad was Frank!

To see his darling Porpoise.
To get him home, "that was the rub,"
So they had made a kind of tub

Stuffed full of blankets—but no grub,
Nor any kind of drink was sub-
stituted for the lack of sea,
From which unkindly they took he,
That Londoners might come and see
 Frank Buckland's darling Porpoise.
 Fishery, fleshery, &c.

Ensconced within the railway van
Sat Tennant, the Society's man,
With marine water in a can,
 And sponge for Buckland's Porpoise.
Frank Buckland too was there, "in course,"
His kind attentions to disburse ;
'Twas lucky the fish had such a nurse,
For he, ere long, was "taken worse."
The cause soon caught Frank Buckland's eye,
And he the sponge began to ply,
For the porpoise he was "werry dry"
 About his nose and corpus.
 Fishery, fleshery, &c.

Arrived in town, through streets they start ;
Friend Bartlett he had sent a cart
In order to perform his part
 To carry away the Porpoise.

Said Frank, "This journey is no joke,
I'm tired, so I'll have a smoke ;"
But in his haste the fusee broke
(Enough a parson to provoke) ;
It hissing, sparkling, fell, alack !
Ere he could save it, in a crack,
And, sad to say, it burnt the back
Of his own darling Porpoise.

Fishery, fleshery, &c.

No joys are e'er without their woes—
With fish, as with us, I suppose—
So thinks Frank Buckland as he goes,
For the porpoise was a raving.
Ye gods ! what can the matter be ?
The water's tinged with blood, d'ye see !
This funny fish has had a spree,
And's trying now to humbug me !
Thus thought Frank—before they start,
What remedy can I impart ?
When, said the man who drove the cart,
"He's cut hisself a shavin'."

Fishery, fleshery, &c.

The Gardens' gate they quickly gain,
Wet through, with the monster of the main ;
But whether there's snow, or hail, or rain,
Frank doesn't care two "fardens."

They place him in the reservoir,
And gave him herrings, three or four,
But he couldn't swallow—his throat was sore,
Frank Buckland mourns—his pet's no more !
So, fishermen all, I hope you'll strive
Another porpoise to "catch alive,"
That Buckland may at last contrive
To have one in the Gardens.

WADDING.

(See Appendix. Further information about porpoises; with hints as to the catching a porpoise with hook and line, &c., will be found in the Appendix.)

THE TURKISH WOLF-DOG, "ARSLAN."

IN May 1863, I received the following letter from my friend Sir Edmund Hornby, at that time judge of H.B.M. Consular Court at Constantinople :—

"I have obtained a dog for you. He is a splendid animal of the Koordish breed, and was procured from the district of Erzenhiern from the shepherds. He is ten months old. His father guards a flock of two hundred sheep against any wolves, and has killed several. His name is 'Arslan,' which means in Turkish 'the Lion.'

"He is very fierce to other dogs, and, young as he is, has already killed several. He is difficult to tie up, on account of the size of his neck, and would be much more mild if left untied; but then I would not give much for the life of anyone who bullied him, or who came uninvited or unintroduced into your room, or who attempted to garotte his master.

"He is accustomed to cold, and prefers it to heat, as his coat shows. His ears are cut in order not to get them lacerated when fighting wolves, hyenas, the panther or black leopard, &c."

Having received Sir Edmund's letter, I was all impatience to receive the dog. The ship "Scotia," on board which he was placed at Constantinople, arrived, after a protracted voyage, at Liverpool. At length, by the aid of a great deal of writing and telegraphing, the dog was one morning announced in a Parcels' Delivery cart.* On my first introduction to him he was not over agreeable. No amount of verbal "soft sawder," or offerings of meat, bones, water, milk, &c., would get a wag out of his tail; and I was obliged to call a brother officer, learned in dogs, into consultation as to what should be done with him. We agreed that the best thing would be to leave him alone, and show him we were friends, not enemies. We led him quietly about the barrack-yard, and in a few hours he found out that we were kindly disposed towards him, and ultimately we were the best of friends.

I thought at first that my dog might possibly show some of the wonderful guiding instinct of the English shepherd dog, but experience shows that he does not. He is possessed of great quickness of sight and hearing, and will sit quietly for hours together simply watching. This, I understand from Lord Strangford, to whom I have shown him, is exactly his character. He does not

* I must here express my thanks to Mr. (now Captain) Pallett, then mate of the steamship "Scotia," who took the greatest care of the dog when on board ship.

act the part of the ever restless, flock-marshalling collie dog, but simply mounts guard on an eminence near his flock, and acts the part of a sentry to them and his master. He may be encountered on the mountains at a considerable distance from his flock, simply wandering on a lonely patrol. He will not attack an intruder unless he approaches too near to the hut or flocks of his charge. He will follow the solitary sportsman or pedestrian for miles, keeping a short distance in the rear, as if determined to see him well off his territories. The shepherds depend much on their guard-dogs, for not only the safety of their flocks, but also for their own personal protection by day and night, and will, I am assured, think nothing of firing on a stranger if he attempts to injure their dogs.

They are very jealous of parting with the breed, and dogs of this kind are therefore seldom seen in England. My dog was presented to Lady Hornby by J. Stephens, Esq., H.B.M. Consul at Trebizond, who values his pure breed exceedingly. I can only hear of two other specimens having been brought to England, and these during the Crimean War, viz., the one by Lady George Paget, the other by Lord Stratford de Redcliffe.

Since I have had Arslan in my possession I have found him of a very amiable disposition to those he knows and who are kind to him, for he is very susceptible of any little attention shown him. With

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dogs, however, he wages the fiercest war; his sole aim and object in life seems to be to attack and kill any unfortunate fellow-canine that comes near him, and this without the least provocation. Arslan has picked up several curs in the streets and handled them most severely; one of these I had an opportunity of examining, for his remains were brought to me the day after the combat. The wounds Arslan had made were terrific. All this happened when I first received my formidable friend. He is now never allowed to go out without a muzzle, and I never dare trust him without his chain and collar (which latter I have ornamented with bells such as are worn by the post-horses in France), or he is sure to pick up a dog.

Strange to say, Arslan never touches my little Scotch terrier dog, "Danny." We had a great difficulty at first to prevent him killing her. After a time, however, I suppose instinct taught him that the little dog was one of the family as well as himself, and Arslan and Danny are the greatest friends possible. He barks when Danny barks, and Danny joins in chorus when her gigantic friend sings a song. The cat and Arslan have had terrible fights, but the cat, holding her own social position, and not interfering with the big dog's privileges, Mr. Arslan has given in at last, and the cat is now quite his master.

His temper is truly affectionate, and he cannot bear to

be left alone a minute. When shut up he positively sobs to be let out; if he can only be in the company of human beings he is quite comfortable, and does nothing but sit and watch for hours at a time in the balcony in Albany Street. When he is not watching he sleeps with his huge carcass stretched, just like a great lazy Turk, out on the floor, but never near the fire. When I show him his muzzle and collar he jumps about, and knows it is his out-door dress, and runs to have it put on. His muzzle makes him look very savage, and condemns him in the eyes of strangers, but he will never hurt man, woman, or child. The poor dog has evidently been brought up to kill dogs, and it is his business. As a proof of this, when he picks up a dog, he looks up with mild beautiful eyes, expecting me to pat him and praise him—not punish him—for what he has done. One day I sent my regimental servant, G. Badcock, to the Paddington station with Arslan, and in an unguarded moment, Arslan being unfortunately without his muzzle, he picked up a wandering cur that came suddenly round the corner. Badcock did all he could to get him off the dog, when some fellow—he could have been no Englishman—came behind the dog and stabbed him with a knife in several places; he then, like a brute, tried to cut his tail off. Arslan was brought home to me bleeding fearfully. I examined his tail, and found an artery cut right across, bleeding

furiously. I tried to catch it with my surgical tenacula, but could not on account of the hair. I eventually, after being nearly deluged with blood myself, managed to stop the hæmorrhage with muriated tincture of iron, matico leaf, and firm pressure. If I had not been a medical man Arslan would certainly have bled to death ; as it was, he was very faint, and I was obliged to give him ammonia, &c. I have since this doctored his tail, and it is, luckily, none the worse for the wound, as it was not cut at a joint. I never could get the name of the fellow who *used the knife*.

I find that Arslan invariably feels the heat very much ; for he always chooses the coldest place he can find to sleep on, and, if straw is given him, scrapes it away to lie on the bare ground.

The strength and power of my giant dog are terrific ; he is just like a great wolf to hold. I am not very weak myself, and I find that when he puts out his strength it is all I can do to prevent myself being pulled bodily over. I send my page-boy, John, out with him daily for a walk. The dog at first used to run right away with John, like a runaway horse in a gig, but he has learned better manners lately, and now he never attempts to bolt.

At dinner-time every day Arslan takes up his position in the sitting position of the "Cave canem" dog, by the head of the table, waiting for bones and scraps.

The moment he sees the *cheese* put on the table he sneaks down stairs, as quietly as possible, into the kitchen, to watch for more scraps. Experience has taught him that after the appearance of the cheese no more meat comes to table, and his Turkish tastes do not reconcile him to cheese.

Since Arslan's arrival I have received the following note from a gentleman holding a high position in the army, and who is well known as a traveller and an observant sportsman, who gives his experience of Arslan's relatives in their native homes as follows :—

“DEAR BUCKLAND,

“Having paid a visit to your dog ‘Arslan,’ and having read with great interest your account in ‘The Field,’ I have thought that you might possibly like to hear more particulars respecting this curious breed of dogs, whose acquaintance I first made on the Albanian hills, whilst cock-shooting in the winter of 1859-60.

“Though every flock that one meets with has one or more of these redoubtable guardians attached to it, I have never seen them used as sheep dogs, according to our acceptation of the term. Indeed, the sheep ‘follow the shepherd,’ in the Eastern fashion, without any driving at all; and the sheep dogs are simply used to guard the flocks against depredators—biped as well as quadruped—and this they do most effectually.

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"So much importance do the Albanian shepherds attach to the fierceness of their 'skillies' (?) that, however savagely the innocent wanderer in search of woodcocks may be attacked, the owner of the dog will *never call him off*, for fear of spoiling him. Any sportsman who has visited Albania must know them well, and has doubtless, like myself, often wished them on 't'other side o' Jordan.'

"An Englishman starting for the Albanian coast is always warned that under no circumstances must he ever *shoot* one of these dogs, (which, by the way, he is often sorely tempted to do before he has been long among them). 'Shoot my dog and I'll shoot you,' seems to be the Albanian version of the old English proverb, 'Love me love my dog.' However, if seriously attacked by them, there is a saving clause in this 'rude law of the mountains.' If a dog comes near enough, you are allowed to *stab* him; his pressing you so closely being considered to warrant an appeal to cold steel in self-defence, the verdict in such a case being 'justifiable canicide.' For this reason, whilst shooting, it is the custom to carry a knife, resembling in shape that used by a *chef de cuisine*, and which fixes by a spring into the inside of one of the barrels of your gun.

"I generally found a bold front, and the fixing of this formidable weapon a sufficient passport for myself and dogs in the neighbourhood of an Albanian village

or flock, but on one occasion I was forced to use it to secure myself a safe retreat.

"It was on the very last day of my *séjour* in Albania, where I had spent some weeks in a native village in the interior with four friends. On the way down to our yacht I got separated from the rest of the party, and found myself on the top of a high cliff overlooking the sea. I stood admiring the scenery, with my face turned towards the cool sea-breeze, when I was suddenly attacked from the rear by one of these formidable antagonists, his owner, 'a wild Albanian, kirtled to the knee,' looking calmly on from a neighbouring eminence. I tried picking up a stone to throw at him, but my stooping only allowed my antagonist to steal a yard nearer to me. I began to feel very uncomfortable. Fancy yourself on the edge of a precipice, with an 'Arslan' keeping guard over you by describing short semicircles round you, showing his teeth the while, and growling in a very ominous manner, and I think you will allow that the situation was as critical as that of a great Yankee general after a 'glorious victory.' After standing thus 'at bay' for what appeared to me to be a considerable time, I at last determined to risk an advance, and proceeded to 'fix bayonets.' No sooner did he see the flash of the steel than my antagonist sprang straight at me. I instinctively lowered my point, which entered his chest, passing out behind the shoulder. He

fell at my feet, unfixing my bayonet in his struggles. After lying still a short time, he rose and beat a retreat, the bayonet still transfixing him.

"I tracked him for some distance by his blood, over the broken ground, and at the end of 100 yards or so I found my bayonet (which, I suppose, he must have drawn out with his teeth) lying in a pool of blood. I was only too thankful to recover my weapon and my liberty to think of continuing the pursuit; and I returned to the yacht impressed with a very great respect for the Albanian king of dogs, who is undoubtedly first cousin to the Turkish one.

"As far as my experience goes, they will face anything—man, wild boar, wolves, or anything they imagine to be interfering with their master's rights; and, though 'bullies' to the smaller of their own species, they are by no means cowards when thoroughly roused.

"C. L. P.

"May 28, 1863."

Arslan killed so many dogs that I was obliged to entrust him to the care of my friend N. L. Austen, Esq., of The Acacias, Croydon, who wishes me to add the following. He is of a rich reddish tawny colour on the greater part of the body, deepening into black on the neck and muzzle; there is a white patch on the chest

and the long hair of the tail is of a lighter hue than the prevailing tint of the body. The fur consists of a soft woolly undercoat (sufficiently thick and dense in texture to preserve the animal from the ill effects arising from the damp and cold), and of a quantity of longer hairs which are capable of being erected at will, and attain their greatest length on the neck and flanks. The dentition is more powerful than that of most domestic dogs, and the bony occipital crest is very strongly developed for the attachment of the powerful muscles that move the jaws. The limbs are peculiarly muscular, and the whole form indicative of immense strength combined with perfect symmetry and grace.

His dimensions are as follows:—

	ft.	in.
Total length	7	5
Height at shoulder . . .	2	8
Height to top of head . .	3	2
Girth of chest	3	8
Girth of neck	2	3

His ears have been cropped, but Mr. J. K. Lord, who has had considerable experience of this breed of dogs on the mountains near Scutari, kindly informs me that the ears, when entire, are slightly pendulous, much resembling those of the Pyrenean wolf-dogs. I have always found "Arslan," with the exception of his hatred to strange dogs, to be most affectionate and faithful in disposition, though when he is once really excited,

you would find you had "woke snakes" in earnest. Since he has been with me he has constantly been at perfect liberty in a large garden, and I have found that his temper has materially improved. I have not experienced the slightest difficulty in reconciling him to my other dogs, and to several belonging to my friends. As I am writing this, I can see him on the lawn with a litter of bull terrier pups about three months old, and associating with them in the most friendly manner, not even considering his dignity affronted by an occasional tug at his tail.

With strange dogs, especially large ones, he is unsafe in the extreme. On one occasion he attacked a fine Newfoundland dog in the road, nearly opposite to our house, and would speedily have killed him if I had not been present, neither the owner of the dog nor the spectators, who rapidly collected to see the row, daring to interfere. I may here mention a safe and humane way of inducing a dog to relinquish his gripe of anything he has seized: Press the nostrils of the dog with the left hand, and, placing the forefinger and thumb of the right behind the upper canine teeth, raise the upper jaw, and the dog will be immediately compelled to let go from his inability to breathe. I find Arslan's bite differs from that of other dogs in the following way: When he has seized another animal, instead of maintaining his hold, he will tear

his teeth violently out of the flesh and muscles without unclosing them, thereby producing a most severe wound. This is also the case with the wolf. He is a capital house dog, and though he will permit most people to pass him in the day-time without molestation, he has a rooted aversion to beggars, and tramps, of every description; and at night it would be dangerous in the extreme for any stranger to venture on the premises.

I remember on one occasion he floored an organ-grinder who presumed to shake a stick at him, sending him and his instrument flying in different directions, besides knocking his wind completely out of him. The poor creature was perfectly green with terror, and none of his fraternity have been seen near the place since. Arslan's bark is peculiarly loud and deep toned, and on a still night I have heard it from a great distance. When fighting however, or irritated, he never utters the slightest sound and never gives warning by his voice of any attack he may meditate. I believe this breed to be the existing type of the Molossian dogs of ancient Greece, mentioned so much by classical authors with reference to their undaunted courage and great strength.

Three of these dogs were considered to be a match for a lion and two for a bear. They are probably the most ancient breed in existence, and as, when

reared in company with other dogs, they become free from savage propensities, they are well worthy of introduction to this country, as their magnificent proportions and great fidelity make them valuable. Arslan unfortunately in former days had been trained to kill all other dogs, jackals, &c. that might come in his way, in order to render him a more efficient guardian to the flock in his charge; but he still can be easily reconciled to any individual dog, and will always remain on most friendly terms with it.

I now finish this chapter by giving a very pretty epitaph on a faithful dog buried in the house once occupied by Charles James Fox, at St. Anne's Hill, near Chertsey :

*In terrâ nuper fidelissimus fuit custos,
Nunc invicem fideliter custoditus requiescat*

APPENDIX

TO

THE FIRST VOLUME.

BATHING LITTLE CHILDREN IN THE SEA.

VOL. I. PAGE 6.

I VENTURE to write a line in favour of little children, and the proper mode of bathing them. I happened to be rowing on my way to "the Spit" buoy, near Southsea Castle, when I heard terrible screams from a bathing-machine. I saw a lady standing in the water with a naked helpless baby in her arms; the poor little thing was screaming in an agony of fright, but, nevertheless, she plunged the terrified child into the sea, then lifting it out, danced it about for a second or two, and then ducked it in again and again pretty deep in the water. The screams of the poor child became fainter and fainter, and at last it was quite still; the sudden shock of the cold water, the effort of screaming, and its fright of the waves had totally exhausted it. The lady then at last began to pet it. Now if I had wanted to *drown* the child I should have done just what this lady did to her baby; she dipped it head foremost, at least six or seven times, deep down into the sea. She gave it no breathing-time, no time for reaction of the skin. She showed no mercy to the fear of the tender infant; and should the little thing have been naturally subject to fits, she would most certainly have brought on sudden congestion of the brain, and possibly, nay, very probably, death.

Now, good ladies, pray do not be cruel to your little infants; make some allowance for their tender fears and their tender little lives; don't trust them to the mercies of the bathing-woman, nurse, or other careless person; *give them time* when about to bathe, encourage them, talk to them, laugh with them; wet their heads gently first, and let them crawl down, of their own accord, into the water (they will do it fast enough in time, never fear); they will be thus pleased, not alarmed. Train them to the water like old Robinson Crusoe trained his kitten, and they will soon become regular "water dogs."

SLEEP OF FISH.—VOL. I. PAGE 20. *

"I have kept carp, tench, minnows, and gold fish in an aquarium. Of these, all but the gold fish appear to sleep at certain intervals; not apparently influenced much by day or night, but by atmospheric changes. Some of them used to lie on the bottom, but most preferred to suspend themselves in the anacharis, where they would remain for many hours without moving a fin, and if a light were held close to the globe would take no notice of it, although at other times a light would always attract them. The gold fish, on the contrary, appeared to be always in motion, and wide awake; night or day, dark or light, they were wandering about like unquiet spirits."—*M. M.*

"The fifteen-spined stickleback (*Gasterosteus spinacia*), as well as the grey mullets, appear to be hardly ever at rest in my aquarium, wandering ever up and down the tank. The gobies rest sometimes all day, and in the evening come out in a troop and play about. The blennies are always hiding, but usually come out and welcome me as soon as I come to the aquarium, returning like a flash of lightning to their favourite rock with the tiny morsel of meat I generally give them. The beautiful riband-like *Muraenoides guttata* is very shy; the dragonets and bull-heads are confident,

and appear to fear nothing. The decided sleepers are the various species of wrasse: after playing up and down for an hour or so, picking up their dinner of infusoria, they quietly retire to their corner, and, lying down on their sides, go (I think) comfortably off to sleep. Each of my wrasses has had one bed-place, where he is always to be found."—*F. Z. S.*

"On my first voyage to the Cape of Good Hope, in 1841, we made fair runs, averaging 150 miles a-day. For at least six or seven days we were accompanied by large shoals of albigores and bonitas. Numbers were taken from the bowsprit by bobbing a hook with a bit of white rag on it, which they seemed to mistake for a flying fish. Many more were struck and caught from the martingale with the granes—a sort of trident with the prongs barbed. Some of the struck and wounded fish escaped, and bore scars upon them which enabled us easily to distinguish them in the clear water. These marked fish followed the vessel uninterruptedly for several days and nights, and for many hundred miles, as no doubt did other fish which we could not identify. All this time they could not have slept, and must, beside constant muscular exertion, have fixed their attention on the ship so as to keep her company. The poor flying fish, too, with all their finny and feathered foes, must sleep with one eye open if they sleep at all."—*Henry H. Methuen*, Allahabad, in "Land and Water," No. 55.

WANTON DESTRUCTION OF SEA BIRDS.

VOL. I. PAGE 107.

"In the 'Times' of April 3, a letter appeared from the Rev. F. O. Morris, of Nunburnholme Rectory, Hayton, Yorkshire, upon the wanton and cruel slaughter of sea-fowl near Scarborough. One man states that he shot 1,200 birds last summer. Three years ago, he, with two visitors, shot 2,000 in three days. Last year ten boats, with different parties,

shot at these birds, while others were on shore, firing at them as they took refuge on the rocks. Nothing less than the extermination of these interesting birds can be looked for, and one of the great breeding-places of the coasts for our sea-fowl will have to be blotted out. Can nothing be done to mitigate such reckless and deplorable destruction? Why should not the Society for the Prevention of Cruelty to Animals exert its influence to preserve the wild as well as the tame from this unmitigated cruelty?"—*Land and Water*.

A WILD ELEPHANT AT HOME.

VOL. I. PAGE 107.

"I passed a month upon the Shyán frontier, in Upper Martaban, and there I once had occasion to confront a noble solitary wild elephant, who permitted me to gaze on him at leisure. One morning I had proceeded to a greater distance than usual, the jungle on either side being exceedingly dense. Scrambling down the steep bank, I at once found myself in the presence of a magnificent tusked elephant, some thirty yards distant or less, luxuriating in a natural shady arbour. Here he stood, holding a leafy bough with his trunk to brush away the flies, as is so common a practice with elephants, whether wild or tame. At sight of me he started, shook his ears, and uttered a sound between a snuffle and a grunt, regarded me attentively for a few seconds, and then resumed his occupation of whisking away the flies with utter nonchalance. My Mussulman servant came up and passed the gun to me behind, asking me if he should put a bullet into each barrel. I replied, 'Decidedly not.' I gazed my fill at the superb elephant before me, and could not but remark how comfortably he had ensconced himself in his bower, convenient to the river. After a while, I returned, and had to repass the elephant's retreat, where again I found him engaged as before, and he took not the slightest notice of our presence."—*E. Blyth*, in "*Land and Water*."

FOSSIL ELEPHANT IN ENGLAND.

VOL. I. PAGE 117.

This is a notice (See "Land and Water," No. 57, Feb. 23, 1867) of the skull of the extinct *Elephas Primigenius*, with its immense tusks in good preservation, which had been discovered near Ilford in Essex, and which is now in the British Museum. I regret I have not space for Mr. Blyth's valuable remarks.

EFFECTS OF SHOT ON FISH.—VOL. I. PAGE 142.

"Among the fishermen in Mount's Bay, Cornwall, I find a belief that fish disappear at the sound of big guns. I have certainly seen a shoal of porpoises disappear on the report of a cannon, without reappearing afterwards, and I have been credibly told that shoals of pilchards invariably go to the bottom during thunder-storms. A fisherman of the bay here recently told me that he has more than once changed from good sport to no sport at all, on the commencement of artillery practice on the bay. One thing is certain, that the increase of artillery practice, and the decrease in the quantity of fish on the inshore here, are going on contemporaneously;—whether this is a mere coincidence, or cause and effect, I want to know."—*M. B.*

"When woodcock shooting in Cornwall, the spaniels drove a water-hen into the mill-leat near to where I was standing on its bank. I saw the bird making its way up the bed of the stream, which was about two feet deep. I fired almost vertically, which brought him to the surface, floating on his back. Thinking I had riddled the bird, I at once pocketed him, as dead. Some time afterwards, my friend exclaimed, 'There goes a water-hen from under you!' and, sure enough, there he was, making off as fast as his cramped legs and bewildered head could carry him, having escaped from my inner pocket. Not a shot was found in the bird's body; and I came to the conclusion that the concussion of the

water must have stunned him, which Mr. Buckland's thoughtful experiment on the jack proves."—*S. S. S.*

"In Norway, as soon as the shallow waters are firmly frozen, men go out to look for fish, chiefly pike, through the ice: they strike a hard blow on the ice over the head of the fish with a large wooden hammer. The fish are killed in this way, provided the ice is thick and the water shallow."—*C. W.*

"I and some of my brother officers have shot fish in the marshes of the Cataragin River, Kingston, Canada, while out snipe-shooting. Our practice was, when arriving at any of the innumerable little creeks in those marshes, to look carefully out for the track of a disturbed fish, and fire at it without seeing the fish itself; frequently the result was the fish turned up apparently dead, but if it was not secured it would soon recover. I never saw any shot-marks on these fish. I have shot carp in a pond in Belgium, and without penetration. I made some experiments, years ago, on the penetration of shot in water, by sinking a pine-board at different depths, but I have lost the results."—*M. V.*

"I was struck with Mr. Buckland's remark respecting the pike which was stunned with the shot. Really nothing escapes his observation, which seems as keen as his scalpel. It may interest him to hear that we have a way of killing fish in Sweden, under the ice, much upon the same principle. As soon as ever the lake is covered in the autumn, so that the ice on the sides will bear us, we go round, over all the shallows, armed with an axe. The fish here, especially the pike and perch, always come up into the rushes at the sides of the lakes at the end of autumn. We go cautiously over the ice (four to six inches thick), on all the shallows, and we can see anything at the bottom. The fish appear to lie close up to the ice (I suppose for the sake of air), and directly we see one we walk cautiously over him, and give the ice a thundering blow with the back of the axe, just over the fish's head. This turns it up at once, and then, as quick as we can, we chop a hole through the ice, and

lug out the fish ; we have to be pretty handy though, for the fish, which is only stunned, soon gets second wind. This we call to ' döfna ' fish : it is capital fun. The season for this kind of poaching does not, however, last long, and I never see anyone try it except just for a week after the ice will first bear, for I fancy then the fish all go back to the deeps."—*An Old Bushman*.

"Being at one time of my life much given to diving, I made a series of experiments on sound, with a view of ascertaining whether fishes, under the water, could hear a sound on shore. I got some forty men and lads to stand by the river-side, and when I was seen at the bottom of the river, to give a unanimous shout ; this was repeatedly done, but I never heard the least sound. I then directed a blow to be struck on the water with a stick, and was as nearly stunned as a fish might be, though my head was at least eight feet from the surface ; indeed, I thought at first that some one had played me a trick—dived after me—and hit me on the head. The conducting power of water is really wonderful, for the stroke of an oar at a mile's distance seems just over head, and a heavy footstep on the bank communicates a perceptible and startling jar to the ears. It is a very good thing for fishes that the auditory organs are so imperfect, for if they were as sensitive as ours, the denser medium in which they live would communicate vibrations of such intensity that the brain would not be able to perform its functions rightly."—*J. G. Wood*.

"I once met a man fishing in a small stream, who told me that in the summer, when the water was low and the trout took refuge under the big stones, that he was in the habit of striking the uncovered tops of the said big stones, when the trout beneath 'them would almost immediately come 'belly up' to the surface."—*Voyageur*.

"When at St. John's, Newfoundland, I was much interested in the matter of submarine blasting which was being carried on at the entrance to the harbour at a depth of from eighteen feet to twenty-four feet. I observed that

quite a number of fish, chiefly of the herring tribe, were killed by the explosion of the charges of powder, which, I believe, were on an average of seventy pounds. The fish floated to the surface quite dead, but not mutilated. In my opinion the fish were attracted by the brightness of the tin cases which contained the powder."—*C.* (Halifax, Nova Scotia.)

"About all large tanks in India there is generally a superannuated shikari with an equally superannuated match-lock, who perches himself on hot afternoons, like a kingfisher, on some branch overhanging a deep sunny corner, where the big fish are lazily floating near the surface. Presently a circle of little bubbles on the water shows where a gigantic 'sork' or 'rhoe' is nearing the air. Our kingfisher blows his match, and as the outline of the monster gets distinct, bang! he fires at his head. Sometimes the bullet hits the fish and kills it, but oftener it sinks stunned to the bottom, in which case the sportsman slips off the tree and plunges in after it, lugs it out, and despatches it with his axe before it has recovered its senses. I have passed many a lazy evening shooting these big fish. Shells are the best things to use for this sport, if sport it can be called. On a cold day the fish will not rise nearer the surface than within a foot or two, and owing to the refraction it is difficult to kill them with a common ball. A shell, however, always explodes on the water, and generally stuns the fish. The natives show their knowledge of an important principle of gunnery by using a reduced charge for this sort of shooting. There is a certain velocity adapted for the penetration of water, beyond which an increase of velocity is disadvantageous. I was much amused once at the disappointment of a gentleman who was very positive that he could shoot three feet of water with his smooth-bored gun. I laughed at the idea, and an experiment was accordingly arranged. A big bathing-tub was to be fired into perpendicularly from the top of a house about three yards high, when I found the tub could offily accommodate

two and a half feet of water. I rather trembled for my credit, but was reassured by seeing my opponent loading his gun with a double charge of powder. The firing place was so close to the water that he got thoroughly splashed as he fired both his barrels into the tub, but neither bullet penetrated the bottom. Had he used a single charge he would probably have succeeded with only two and a half feet."—*J. F.* (Central Provinces, India.)

ENORMOUS JACK.—VOL. I. PAGE 146.

Martin, the water bailiff at Maam at the head of Lough Corrib, told me of an enormous jack which he had found floating dead near a bed of rushes. He carried him home on his back, and he was such a huge fish that his tail then dragged along the ground behind. We measured Martin, and found that the length of the jack would be about 5 ft. 8 in. He did not know the weight of the fish, but anyhow "it made plenty of kitchen for the whole of his family for nearly a week." He thinks the jack must have died from old age, as he did not see any marks, or wounds, or injury about him. An enormous jack was lately prepared by Mr. Spencer, of Great Portland Street; this fish was found dead in a pond belonging to the owner of Kington Park, Warwickshire, fixed in between a stake and the bank. His length was 4 ft. 1 in., and his weight was said to be 37½ lb.

As regards the relative proportion of the weight to the length of fish, my friend, Sir Philip de Malpas Grey Egerton, writes me as follows: "I send you a formula which was communicated to me the other day for deducing the weight of a salmon from his dimensions, in the hope that you may be able to test its accuracy. I have only had one opportunity, and the calculation came out very near the truth. 'Given the length and girth of a salmon in inches: to ascertain his weight, add one-third of the length, multiply by the square of the girth, and divide by 1000; the product will be the

weight in pounds.' Of course accuracy cannot be expected in a calculation of this description, and the result must depend very much upon the shape of the fish; but I believe it will give as good an approximation as the formula for ascertaining the weight of cattle by their dimensions."

On the steamer which runs from Galway to Cong, a gentleman told me that a man had caught a pike in Lough Cong which he himself had seen weighed in the scales, and it turned the beam at 47 lb.

MONSTER PIKE AT ESHER.

Ewen Macdonald, Esq., Her Majesty's Agent at Claremont, was kind enough to write me on Monday, September 30, to say that an enormous pike had been found, September 28, floating dead in the ornamental waters at Esher.

Hearing a rumour that it was likely to be buried, I sent down for it immediately, and rescued it from premature interment. It however smelt so dreadfully that my boy John had some difficulty to persuade the guard to accept it in the train, and the omnibus conductor positively refused him a passage.

The pike's measurements were as follows:—Length from nose to top of tail 3 feet 10 inches; girth behind head 1 foot 8 inches; in middle of back 1 foot 7 inches; breadth of tail 7 inches; teeth nearly 1 inch in length. He had been probably dead some three or four days. Mr. Macdonald thinks he was thirty years of age. My scales gave his weight twenty-six pounds and a half, but the fish had lost much by drying. I managed, by the aid of Condyl's disinfecting fluid, to sweeten the fish a little bit, and before one o'clock that morning made a capital mould of him. I then buried him in the coals in the cellar until the morning, for I find coals to be a capital disinfectant.

I next morning cut his head off, which is being dried as a companion to my 20lb. cod, and buried his body. The

stomach was entirely empty, and I could find no cause for death whatever. It is not impossible, therefore, that old age was the cause of its decease. A cast of this "dray horse" fish is now in my museum at the Horticultural.

PAGES 193, 206, 254, 308.

I have added so much new matter to the text of this second edition that I regret I cannot find space for these notes.

ANATOMY OF THE PORPOISE.—VOL. I. PAGE 322.

The proper way to dissect an animal is to start with the preconceived idea that you are about to examine an intricate animal machine, the composition of which, although bone, flesh, and blood, is so wonderfully and admirably put together that human art cannot equal, and certainly not excel it—that it meets most perfectly all the conditions of life, whether on dry land, water, or mid-air, in which the creature passes its existence.

In the porpoise we have a capital and really wonderful example of the power of nature, and the beauty with which she is enabled to solve the most difficult questions of complicated mechanics. In order rightly to understand this point, we should consider a task such as the following placed before us:—"You are required to construct an animal which shall be warm-blooded, have lungs, and a four-cavities heart. It shall be strictly mammalian both as to skeleton and internal organs, especially of respiration. This animal is to be born in the ocean, and to live in the ocean all its life. Send in your plans and drawings showing how you propose to adapt a mammalian structure to the ordinary conditions of a fish's existence, and especially demonstrate how you would conform the nostril so that not a particle of air should ever, at any time, enter the lungs. The

animal shall never, for a moment of its life, be out of water, in a more or less turbulent condition; yet so contrive that not a drop of water shall ever get into or near the lungs." I think this would be a puzzler for most of our engineers.

See how beautifully nature has met the required conditions. In the first place, the bones of the porpoise are not firm and hard; the mineral matter is not in excess, as in the hard bones of birds, but oil takes its place; the bones are not soldered tightly and firmly together, they are in every way elastic—in fact, the beast is always carried on elastic springs in the water.

It is one of the laws of nature that all mammalia should have *seven* bones in the neck (cervical vertebræ)—man has seven—the long-necked giraffe seven—the horse seven—the camel seven—the porpoise and the whale seven. The long and supple neck is of great service to the giraffe and camel, but a long neck would be much in the way in the case of the porpoise; he needs only a short neck for his mode of life. Nature will, nevertheless, not break her law. In the giraffe the seven cervical vertebræ attain their maximum of length; in the porpoise they are diminished to their minimum. My animal was 44 inches long, yet his neck measured but half an inch; the first bone, which supports the head, is wide enough for its work, but the others are all compressed together, somewhat like a number of small saucers placed one upon the other.

Now what must be done about the four extremities? A porpoise must not have a hoof like a horse, a wing like a bird, nor yet a fin like a fish; remark the compromise between the three. When we see the live porpoise in the water, we observe that his mode of progression is by two *paddles* in front and one paddle behind. The front paddles *externally* look like fins; but dissect off the skin, and you will find underneath, four regular fingers and one thumb, a wrist-joint, two bones of the fore-arm, one of the arm proper, and a well-formed blade-bone. These fingers are outspread, like a man's hand uplifted in a state of wonder;

and they have all, as it were, been set fast in one solid glove formed of the skin proper. Thus they can never act independently, but working together in one plane, and shut up in a skin case, form a most excellently-working water-paddle. The porpoise has *no* hind legs; they would be of no use to him. In the "Talking Fish," or seal, the hind legs and tail are united, so as to form a capital swimming flap. In the porpoise all the progressive motion proceeds from the tail. This tail is not fastened on like a fish's tail, but at right angles to the body and not parallel with it. Its mode of working is obvious: the porpoise must come frequently to the surface to get air; a single flap of the tail will bring his nose up to the surface from a very great depth.

Now we come to the most difficult problem of all, viz., how to prevent this mammalian air-breathing animal from being every minute of his life liable to death by drowning, and a most beautiful bit of mechanism we have before us. A porpoise has been most appropriately called a "sea-pig" —a "hog-fish;" his carcase is like that of a fat bacon pig. We will, therefore, take a pig's skull, and make our comparison. In the pig, the nostrils run along the whole length of the bones of the nose; in the porpoise this hole is soldered up, the upper jaw is quite solid, and (with the under jaw) is devoted entirely to the purpose of catching his food.

If we take a pig's skull, and bore a hole, curving backwards from the top of the skull down to the palate, and turn up the windpipe *into* this hole so that it shall come out at the top of the head, we have a model of what we actually find in the porpoise. Upon making a section of the skull of a porpoise, we shall find a curved hole through its substance; the windpipe ends (by the larynx) in this hole, and does *not* prolong itself into the upper jaw at all. The larynx, or Adam's apple, also is very peculiar in shape; it is elongated like a human finger, and fits accurately the hole in which it works.

So far, so good. Now, then, contrive your valve which shall never allow water to enter into this windpipe. In

the porpoise there is a valve in the skin, on the top of the head. This opening is crescent-shape, the crescent being directed forwards. The valve is opened by the animal when it wishes to breathe, and it is closed again instantly (like the valve at the bottom of a pair of bellows when being worked) after the respiration has ceased. Passing the finger into this valve, we find two passages, and these are the two nostrils; but the finger cannot pass easily *into* them, because there are two prominences which pass, "like the bolt of a double-lock," right across the nostril into cavities on the other side, in which they fit accurately. In fact, we have in this apparatus the combination of the conical stopper of a wine-decanter with the action of the bolts of a door-lock.

But a drop of water may possibly get through the "bellows valve" at the top of the head, and it *might* trickle down into the lungs. The water, however, soon finds that "the double-acted valve stops the way." Supposing this should happen when the porpoise is deep down in the water, the intruding water must consequently wait somewhere or other till it can be expelled. We find, therefore, above the point where the obstruction exists, two large pouches, which, when distended, are as large as oranges; into these pouches, therefore, the water *must* go, and there it waits till the porpoise comes to the surface, when—whish—in a moment the internal valves give way, and out come air and water together in that wonderful "spout" which we hear of from sea-going friends as coming from the "blow-hole."

But, say you, the water may get down his mouth, and so into the larynx. I beg your pardon—nature is up to that; for even were the porpoise to swallow water, the level of the *top* of the windpipe is about half way up the head, and well *above* any water that can come into the mouth. The soft palate moreover hangs down like a curtain at the back of the mouth, and so shuts off all communication, unless the beast wishes to raise it and let the food go down. This

palate, even, has a hole in it, through which the windpipe plays, and a compressing muscle surrounds the hole, so that any water coming in *that* way would be ordered off the premises in a moment.

In the gigantic elephant we see the nose prolonged to a marvellous degree, so as to form an organ of prehension as well as of breathing. In the porpoise this same nose assumes a totally different form; it becomes "snubbed," and is made to form a valve most complex in its structure, yet most simple in its working. It works day and night, summer and winter—when the sea is as smooth as glass, and when the tempest drives the terrific storm-waves before it—yet it never ceases the guardianship of the life of its owner; it never flags, it never tires. Shall we not pause in our hurried career through life and contemplate such an admirable instance of the power of Him who, when the earth was as yet young, "created great whales and every living creature that moveth, which the waters brought forth abundantly?"*

FISHING FOR PORPOISES.—VOL. I. PAGE 322.

I have often thought what capital fun it would be if we *could* manage to hook a lively sea-pig with a hook and running tackle; for as seen in my experiment, he will snap at a bait made to spin nicely, and I cannot help fancying that if one were to rig up tackle on a somewhat larger scale, and the bait were judiciously trailed near the beast, he might be inclined to take it; I throw out the hint for yachtsmen; it is worth while trying, if only for the fun of the thing. The line should, I think, be coiled up in a barrel, so that it would run out easily, according to the plan adopted by whale fishermen in the Arctic Sea. I now give some correspondence which took place on this subject.

* Mr. Bartlett tells me that besides the porpoises mentioned in his book, he has received five others at the gardens; none lived more than seven days. I should like to try one in the Serpentine.

"I never saw a porpoise take a baited hook, but have heard of such a thing. I do not imagine he could be held with any line of less strength than a cod or conger line. If he be a little puffer, or herring-hog, from three to five feet in length, something might be done with him; but should a large bottle-nosed fellow get fast, of six to eight feet in length, he would dart off like lightning; and at least a hundred fathoms of line should be provided for his first rush, after which he might be allowed to tow the boat until tired; and unless the sportsman is a thorough practical seaman and a good swimmer, he had better not attempt it."—*J. C. Wilcocks* (Guernsey).

"I have heard of several instances of porpoises being caught with a line, but I fear the injury done by the hook would prevent his surviving his capture."—*Henry J. B. Hancock*.

"Watching porpoises from the south coast of Devonshire, it struck me that one of them might have been hooked with well-arranged snap-tackle, if he would have taken a bait. A light boat and two 'good oars' would enable an angler to spin a herring or mackerel a hundred yards from the stern, across or ahead of the animals. The line should come from a strong stiff rod, and a very large reel of easy working. I think the chance of a capture well worth the cost of a few trials."—*R. L.*

"I have devised and partly constructed the following tackle, but I do not know if a porpoise will take a bait. It consists of a piece of board, about ten inches square, with a copper bolt fixed perpendicularly through the centre. On each end is a strong swivel; to one swivel would be attached the line (say fifty fathoms), armed with very strong hooks, fixed to very strong gimp. To the other swivel would be fixed a good strong line, having on its further end a large cork or a bladder. In the event of striking a porpoise, the small board would immediately be thrown overboard, and would form a yielding force to each pull of the porpoise; if necessary, the whole line could be

thrown overboard, as the bladder would enable it to be recovered. Weights sufficient to keep the hooks a few feet below the surface of the water must be attached."—*Salamander.*

My friend Mostyn Owen, Esq., has shown me the plan by which he used to catch crocodiles with trimmers baited with live ducks. I think a modification of it would catch porpoises, using a mackerel as a bait.

END OF THE FIRST VOLUME.

